A COMPUSERVE PUBLICATION PRINTED MONTHLY/ONLINE DAILY

ONLINE TODAY

THE COMPUTER COMMUNICATIONS MAGAZINE

May, 1988 $2.50

Forum Remodeling

Electronic Meeting Places Redesigned for Ease of Use

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The OAG Electronic Edition.

The star performer...with departures from your terminal.

USE THE NEW SEAT AND FARE AVAILABILITY COMMAND...

You're about to embark on a whole new travel planning adventure. The flight is going to take off according to schedule—*yours!* And it's up to you whether you want to "look or book."

It's easy to get started! Enter /S (RETURN) after the Welcome Screen. Remember to enter RETURN after each command. The OAG ELECTRONIC EDITION will prompt you automatically.

1. First, let's take a look at the flights! After the /S prompt, you can take a "short cut"...by entering your departure city, destination city, departure date and time. For example, if you're going from Chicago to New York on August 21 at 6 A.M., you'd enter: /schi;nyc;21aug;6a. A flight display will appear.

DIRECT FLIGHTS FRI-21 AUG
FROM CHICAGO,IL,USA
#TO-NEW YORK, NY; NEWARK, NJ, USA

1*	600A	ORD	854A	LGA	UA	60	72S	B	0
2	600A	ORD	900A	LGA	AA	312	72S	B	0
3	630A	ORD	928A	EWR	UA	132	747	B	0
4*	630A	ORD	931A	EWR	AA	906	m80	B	0
5	631A	ORD	922A	HPN	UA	678	73S	B	0
6	700A	ORD	954A	LGA	UA	62	767	B	0

*THOMAS COOK TICKETING ONLY
ENTER + , X#, F#, CX, RS, A#, B# (# = line number)

2. Ready? Let's take a look at the seat and fare availability for United Flight 132 to Newark. Key in **A3** (A for availability...3 for the line number.)

3. Now enter the number of people who are traveling...to a maximum of four, e.g. **3.**

4. The system will ask you what type of trip you want to take: 1 one-way 2 round-trip
3 round-trip—return date unknown.
Key in **2** for round-trip.

5. Enter return date and time: for example, **24aug;6p.**

6. A list of fares for the selected flight and whether or not they are available will appear. *ONLY THE OAG ELECTRONIC EDITION LINKS SEAT AND FARE AVAILABILITY!* With other systems, you need to book first before you can learn what fare you'll be paying!

7. Want to see if you can get a better fare by going a half hour later? Simply enter A6 to see what United Flight 62 to La Guardia Airport has to offer. The OAG Electronic Edition will remember how many travelers you selected, the trip type and your return date.

But what happens if your return date is unknown? Can you still take advantage of the best fares? Absolutely! In fact, the more flexible you are in your travel dates and times, the more you can save!

Want to book your flight? From your schedule or fare availability screen enter B and the line number of your selected flight or fare.

For more information, enter /I, or phone the OAG help desk 24 hours a day;
Continental U.S. 800 323-4000
Outside Continental U.S. 312 562-4455
ON COMPUSERVE, ENTER: GO OAG

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With a NEW command that gives you everything you need to easily choose the lowest fare on the exact flight you want!

When it comes to helping you select the *lowest* fare for the flight *you* request, the OAG ELECTRONIC EDITION really shines!

It's the brightest star among all travel planning options, and it's the system that lets you check out whether or not the fare you want for a flight is actually available *before* you decide to book.

Never again will you have to waste valuable time on-line or on the phone researching each and every fare for a city pair—even fares for flights and dates you don't want. Never again will you have to be "in the dark" about your fare options if you don't know your return date!

VIEW JUST ABOUT ANY FLIGHT UNDER THE SUN!

You can compare over 2,000,000 direct and connecting flights for over 600 airlines worldwide—right from your desktop computer...linked with thousands of North American and international fares. No more settling for a flight that's "almost" right for you.

OPEN UP WORLDS OF CONVENIENCE-WITH OAG'S EXCLUSIVE "LOOK OR BOOK" OPTION!

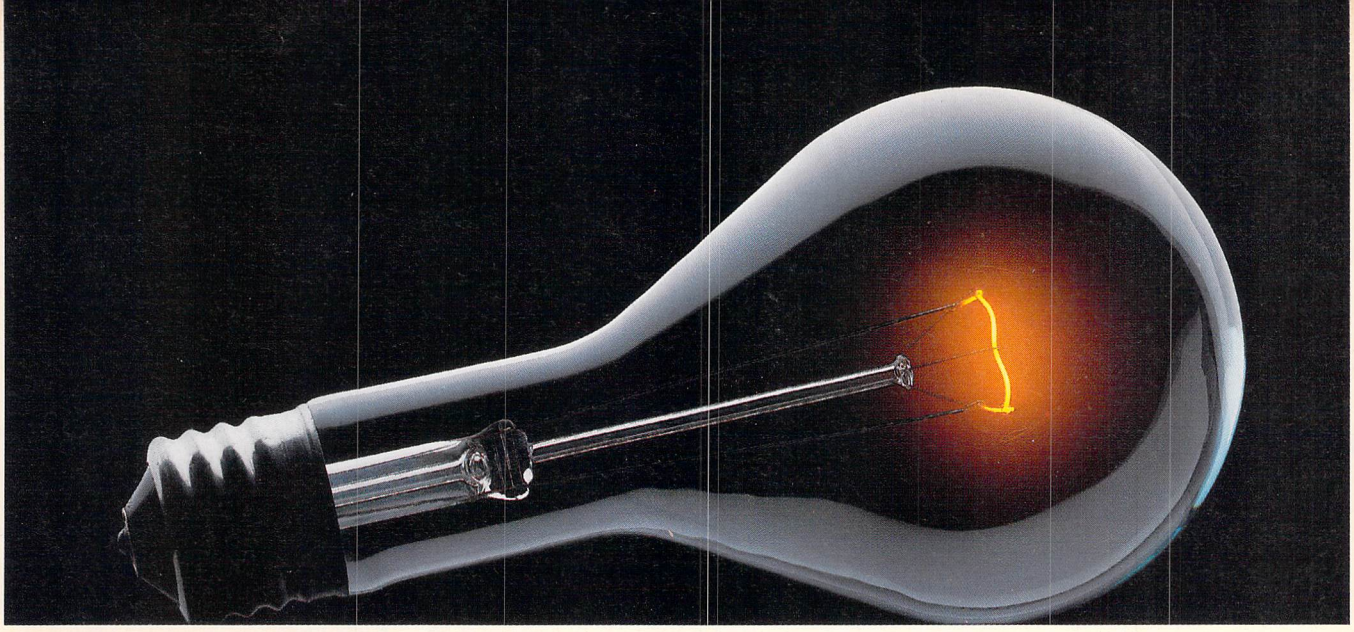
One of the first things you need to know to plan travel is, "are there any seats left on the flight I want...at a fare that's good for me?" With the OAG ELECTRONIC EDITION, you can check if there are seats or not—in seconds—and even view the different fare classes for those seats. Then...only if you want...you can book those seats—day or night!

BRING THE ROCKETING COSTS OF FLYING DOWN TO EARTH WITH ALL THE FARE OPTIONS!

Only the OAG ELECTRONIC EDITION lets you check out fares for the exact flight, date and time you want...even if you don't know your return date. You can find a flight that leaves 15 minutes earlier and saves you hundreds of dollars. Upgrade from coach to first class and actually come out ahead. Travel mid-week instead of peak travel days for significant savings. The possibilities are endless!

The OAG Electronic Edition.
There's nothing on earth quite like it!

GO OLI or circle 1 on the Reader Service Form.



CompuServe.
You Don't Have To Know How It Works To Appreciate All It Can Do.

CompuServe is a computer information service. You subscribe to it. In return, you have access to an incredible amount of information, entertainment, communications and services. Here are a few of the hundreds of amazing things you can do.

COMMUNICATE

CB Simulator features 72 channels for "talking" with other subscribers. National **Bulletin Boards** let you post messages where thousands will see them. Friends, relatives and business associates can stay in touch through **EasyPlex™ Electronic Mail.**

More than 100 **CompuServe Forums** welcome participation in discussions on all sorts of topics. **Software Forums** help with online solutions to software problems. **Hardware Support Forums** cater to specific computers. There's even free software, and online editions of computer periodicals.

HAVE FUN

Play all sorts of sports and entertainment trivia games, brain-teasing educational games and the only online TV-style game show with real prizes. Or, for the ultimate in excitement, get into an interactive space adventure.

SHOP

THE ELECTRONIC MALL™ takes you on a coast-to-coast shopping spree of nationally known merchants, without ever leaving home.

SAVE ON TRIPS

With CompuServe's travel services you can scan flight availabilities, find airfare bargains and even book your own flights online. Plus, there are complete listings of over 28,000 hotels worldwide.

BE INFORMED

CompuServe puts all of the latest news at your fingertips, including the AP news wire, the *Washington Post*, the *St. Louis Post-Dispatch*, specialized business and trade publications and more. Our executive news service will electronically find, "clip" and file news for you... to read whenever you'd like.

INVEST WISELY

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So easy the whole family can go online.

CompuServe is "menu-driven," so beginners can simply read the menus (lists of options) that appear on their screens, then type in their selections. If you ever get lost or confused, type H for help. Remember, you can always ask questions online through our feedback service or phone our Customer Service Department.

Before you can access CompuServe, you need a computer, a modem (to connect your computer to your phone) and, in some cases, some simple communications software. Now you're ready to order. For your low, one-time subscription fee, you'll receive:

- a complete, easy-to-understand, 170-page spiral-bound Users Guide
- your exclusive preliminary password
- a subscription to CompuServe's monthly magazine, *Online Today*
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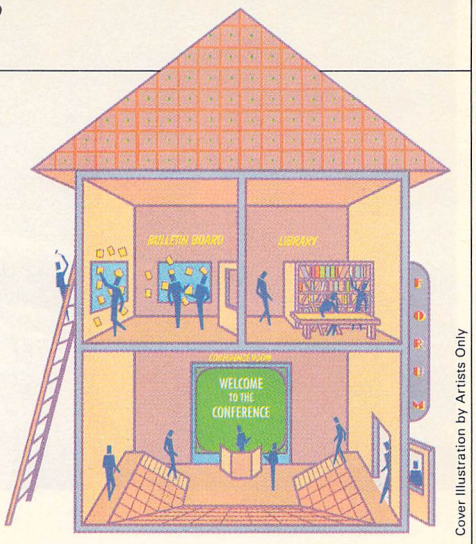

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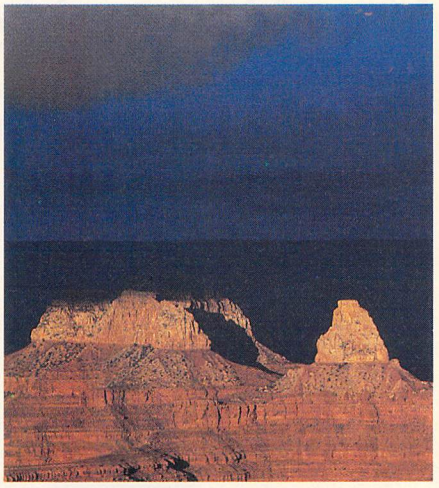

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Too Hot to Print

Catch computer industry news as it happens, keep up with online events, read special reports, commentary and more product reviews. You'll find it only in *Online Today Daily Edition*, a daily-updated newspaper full of information that's too hot to print. GO OLT.

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Letters to Editor	**OLT-30**
News This Week	**OLT-20**
Online Inquiry	**OLI-1**
Online Today Columns	**OLT-110**
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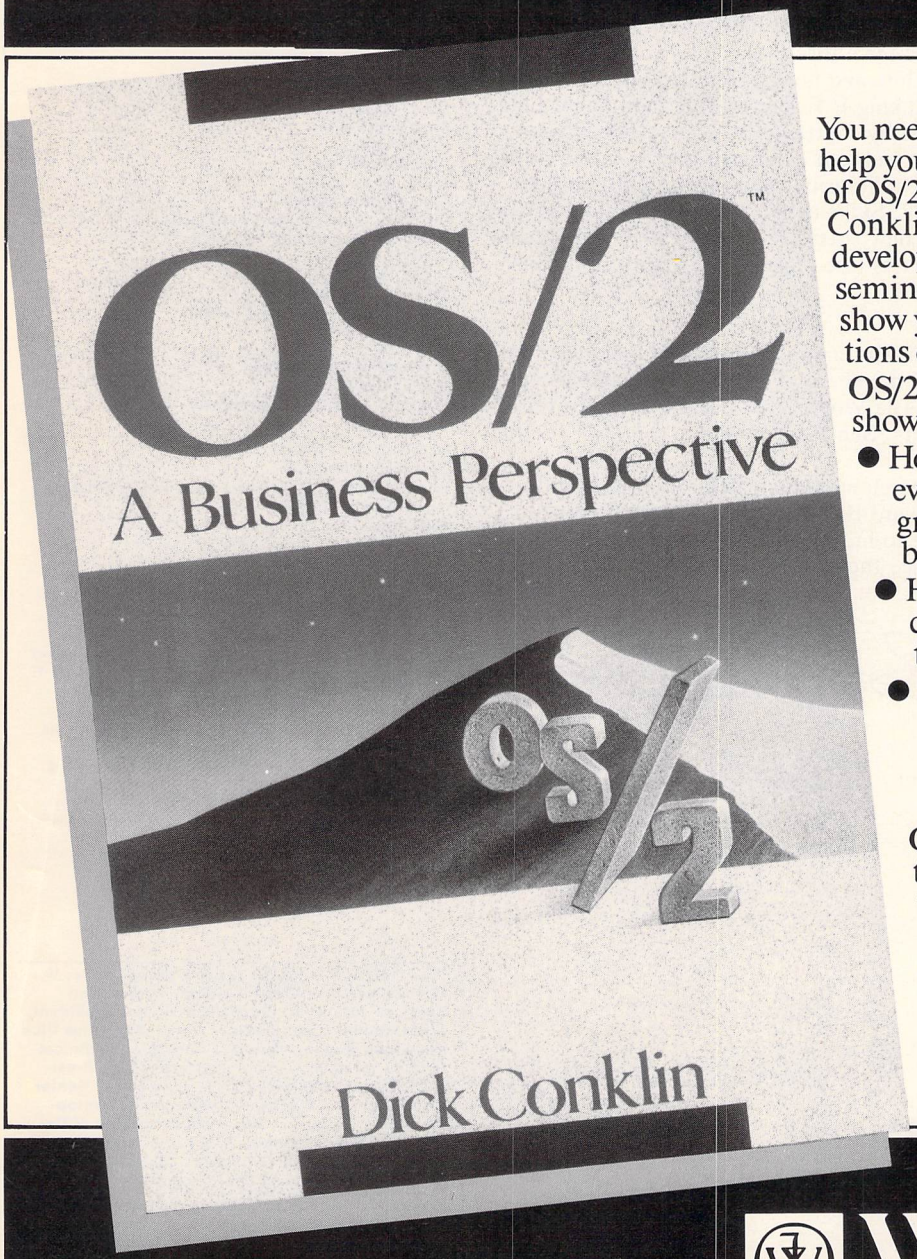
Product Reviews	**OLT-200**
Special Reports	**OLT-2000**
Today's Daily News	**OLT-90**

THE AUTHORITY ON OS/2™...



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WILEY

GO OLI or circle 2 on the Reader Service Form.

DEAR READER

If you've ever remodeled a family room, converted a spare bedroom into a sleek home office or even constructed a backyard deck, you may have invited friends over once the project was finished to see the results. Whether or not you did the actual labor, you still felt a certain pride of workmanship as you rolled out the "welcome" mat—it was your ideas and needs that shaped the outcome.

A "home improvement" project of sorts has been in progress over the last several months on CompuServe, and everyone is invited to the "open house." Based on suggestions from subscribers, CompuServe has redesigned its online forums to increase ease of use. While the overall function of the forums—linking people who share specialized interests—is the same, menus and commands have been modified to be more logical and intuitive. To reach the front door, type FIND FORUMS and use the GO command for a forum that interests you.

For more information about the remodeling and how it came about, see this month's cover story, "Forum Redesign: Making It Easier to Meet and Greet Electronically," beginning on page 20. Authored by Matthew Burns, a CompuServe technical writer, the article gives you the grand tour of improvements in the forum message boards, conferencing areas and data libraries. You'll get a closeup view of the revamped message boards on page 27. Skills acquired using the old software will be almost entirely transferrable to the new software, and the new software offers enhancements for seasoned forum users (see page 26). A handy command conversion table is also available on page 26.

* * *

Speaking of forums, the IBM PC Vendor Forum has expanded to include 10 software and hardware manufacturers, and members of the IBM forums have access to a keyword-searchable database. The WordPerfect Support Group Forum now addresses the needs of Macintosh users. See the Computing Services section, beginning on page 18, for more details.

Also in this issue, read about how to search computer product reviews in Microsearch (page 16) and find out how Dr. Howard Bleich of Boston's Beth Israel Hospital brought the PaperChase database to life (page 15).

For a change of pace, take a hike—to see the legendary red rock formations and beautiful sunsets of the Grand Canyon. For a travelogue, see page 49.

Douglas G. Branstetter
Editor

ONLINE TODAY

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LETTERS

Telephone Rates

I live in a rural area of north central Pennsylvania and I've discovered that the expensive part of using CompuServe or any other network is not the connect charges, but the long distance phone call. Accordingly, most of my accesses are during weekend rate periods.

By accident, I discovered a little-known fact that may assist other rural long-distance users: it is considerably cheaper to connect to an out-of-state node than to one in your own area code. In my case, a 100-mile access through Buffalo, N.Y., is less expensive than a connection through Erie, Pa., a city in my own area code. This was verified by calls to the telephone business offices.

To determine your own best connect city, first log on and request connect numbers of the nearest out-of-state area code to your terminal. Do the same for your own area code. Armed with these numbers, call your telephone rate quote operators (try dialing "00") and request rate quotes for these calls. The results may surprise you.

T. L. McCormick
Port Allegany, Pa.

Missing Uploads

The Uploads section in the *Online Today* March issue listed two new programs in the Amiga Forum. I couldn't find either EMPBIN.ARC or YOURMO.ARC.

Edwin L. Brawley
Albuquerque, N.M.

Editor's Note: To access these files, type GO AMIGAFORUM at any CompuServe Information Service prompt. From the forum's function prompt, type DL7 and then type BRO EMPBIN.ARC at the data library prompt. Or from the forum's function prompt, type DL8 and then type BRO YOURMO.ARC.

Online Today Daily Edition

I enjoy reading the "Behind the Screens" column. The idea that computer-based communications is just beginning to take off is exciting. The online availability of text and services is overwhelming now—I can't imagine what it will be like in the future.

Jeffrey D. Smith
Philadelphia, Pa.

In the recent *Online Today Daily Edition* story about Macintosh and IBM-PCs coming together (OLT-323), Cathryn Conroy stated that the Macintosh has been able to do multi-tasking for years. That's not true. The only personal computer that has been able to do multi-tasking for years is the Amiga. Using Multi-Finder, the Macintosh has very limited multi-tasking abilities.

Don Curtis
Denver, Colo.

I was pleased to see the *Online Today Daily Edition* article (March 16), "Indiana Bans Measured Service," (OLT-447) by Jim Moran regarding local measured service in Indiana. However, I do wish to mention that this ban by our legislature is only for three years.

Sandra Donovan
Indianapolis, Ind.

Send a Letter

OLT-30 **Letters to the Editor** *main menu. Lists all departments.*

OLT-31 **Send a letter instructions.** *Complete instructions on how to send a letter to the editor via the electronic service.*

OLT-32 **Read letters** *from other OLT readers.*

OLT-33 **Send a letter** *to the editor. You will receive prompts for each step in the process. Important Note: We cannot answer questions regarding the CompuServe Information Service through this service. If you have questions or problems, please use the Feedback service (GO FEEDBACK).*

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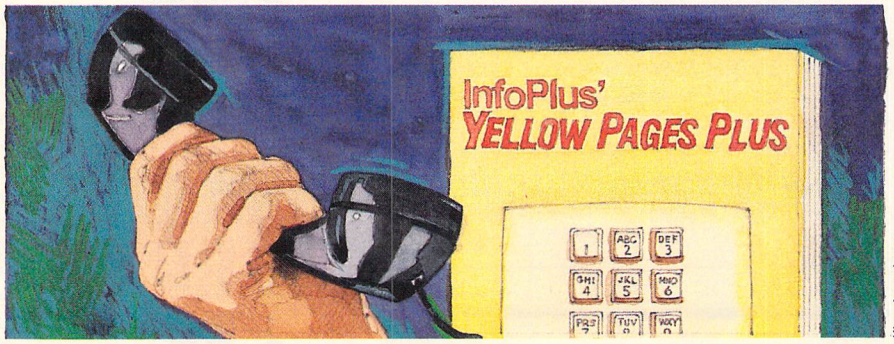
NATIONAL E-MAIL REGISTRY

GO OLI or circle 3 on the Reader Service Form.

Let Your Fingers Do the Talking

For saving time, nothing beats checking the Yellow Pages before trekking to a store or restaurant. But sometimes you want more information.

Residents of New England now have access to talking Yellow Pages. Produced by Perception Technology and InfoPlus Inc., these Yellow Pages come in two parts: the book and audio text, accessible from any Touch Tone telephone. This latest application of voice-response technology functions much like popular home banking, where a customer calls the bank and, through a menu, pays bills or transfers funds.



King Associates

Marketed under the name TELADIS, the system takes voice-response technology beyond the realm of simple transactions to large-scale information dissemination. "It is essentially a talking Yellow Pages," says Mary Farrell, marketing communications director of Perception Technology.

Directly competing with the Yellow Pages published by Nynex, the regional Bell operating company, InfoPlus' Yellow Pages Plus offers recorded messages from advertisers appearing in the print edition. In addition to the usual information in the print ads, there is a four-digit code that can be called for a 20- to 60-second message. These messages can be changed as frequently as the advertiser wants.

From the advertisers' point of view, the effect is revolutionary. Once considered a rather static form of advertising, the Yellow Pages has become as immediate as radio or newspaper advertising, and in some cases even more so. For instance, a bank's recorded message could advertise daily interest rates and an employment agency could present its latest job openings.

"We're changing a medium that has not been changed in 75 years," says Stewart Greenberg, executive vice president of InfoPlus.

With more than 5 million books distributed, Greenberg says the system receives 2 million calls monthly. In addition to calling advertisers, consumers can call for the latest weather updates, stock reports, racing and lottery results, and even soap opera summaries.

For information, contact Greenberg at InfoPlus Inc., 145 Rosemary St., Needham, MA 02194; 617/444-6166.

What's the Weather?

For most of us, bad weather is usually little more than an inconvenience. But farmers have a vested interest in what tomorrow's weather will bring. Now, the US Agriculture Department has developed a microcomputer program that enables farmers to create their own tailor-made weather forecasts.

CLIMATE, developed by David A. Woolhiser of the agency's Agricultural Research Service, analyzes more than 40 years of National Weather Service data to predict local conditions. According to Woolhiser, the user tells the computer the exact location of the farm by positioning a dot or cursor on a state map on the system's monitor.

"For each farm, the computer program selects appropriate weather characteristics from data at nearby weather stations," Woolhiser says. The program will run on computers that farmers and ranchers already use to make business decisions, he notes.

More details on CLIMATE are available from Woolhiser at the Aridland Watershed Management Research Laboratory, Agricultural Research Service, USDA, Tucson, AZ 85719; 602/629-6381.

Local National Weather Service forecasts are available by typing GO WEA on CompuServe.

—John Edwards

Logging on Locally Now Easier Than Ever

Logging onto CompuServe is a simple matter for most subscribers; easy access through a local node is usually taken for granted. But for those who live in small towns or remote areas, logging on can be anything but simple, making the CompuServe node expansion good news for residents of such places as Myrtle Beach, S.C., Grand Junction, Colo., and Rapid City, S.D.

During the past year, more than 20 cities have been added to the network, bringing the total number of nodes in the United States, Canada and Puerto Rico to nearly 1,200.

Many of the small locales are receiving their own nodes because of CompuServe's agreement with VISA to provide the network for point-of-sale verification. "The installation of nodes is often driven by where people are using credit cards," explains Vickie Rutkowski, manager of network administration.

She says that two to three new cities are added each month. "At any one time we probably have six cities or more waiting for an engineer to survey the site or waiting for lease approval."

As 2400-baud modems are a growing force in the market, CompuServe is responding by rapidly expanding its 2400-baud access. Eventually every city in the network will have access to 2400 baud. And looking further ahead, a pilot project to test 9600 baud is being launched in 10 cities this spring.

By using the CompuServe network, rather than one of the supplemental networks such as Tymnet or Telenet, subscribers can save substantial communications surcharges.

Rutkowski says that suggestions for new node locations are welcomed. All suggestions are investigated by CompuServe officials. "We do everything we can to install a node in a suggested location," she explains, adding that if installation is not possible, the suggestion is passed on to Tymnet or Telenet.

For more information about CompuServe's local access numbers and to check for new nodes in your area, type GO PHONES.

—Cathryn Conroy

Data System Helps Manage Diabetes

Computer technology and medicine have once again joined forces—this time to benefit the diabetic.

A computer program developed by Miles Laboratories plays like a game, but serves the serious purpose of helping to control diabetes. Called the Glucometer M Diabetes Data Management System, the program reinforces positive behavior. The tangible reward of seeing improvements, displayed in four-color charts and graphs on a computer video monitor, is provided.

Glucometer links a hand-held blood-testing meter with a personal computer software program. Each time the user conducts a self-test of his or her glucose (blood sugar) level, the meter automatically stores the data for future recall. The meter can record up to 338 glucose values, providing a significant enhancement to the conventional hand-written "log book" many diabetics must keep.

The real advance, however, lies in the analysis of the data. During periodic visits to the doctor's office, the stored readings can be transferred by a direct connection to a desktop computer, which organizes them into a variety of charts and graphs. That data provides an overall picture of how an individual has responded to food, activity, medications, insulin, stress or illness over several weeks.

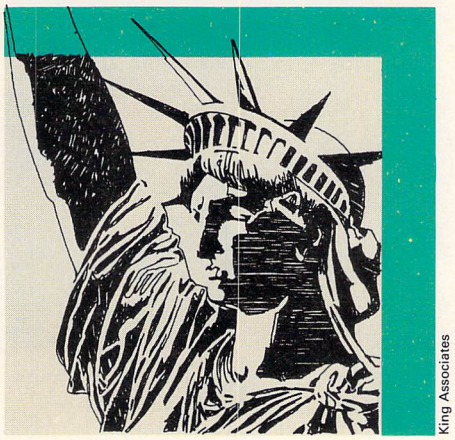
In addition to spotting trends and irregularities, Glucometer can encourage better dialogue between the patient and physician.

Findings from the Indiana University School of Medicine show that the Glucometer may help overcome some of the psycho-social obstacles in treatment. Specifically, patients are more honest in their reporting, they are more accepting of the reality, communication between doctor and patient improve, and patients receive positive reinforcement from the meters.

For information on the Glucometer, contact the Ames Division of Miles Laboratories, P.O. Box 70, Elkhart, IN 46515; 219/264-8653.

For more information on diabetes, consult the PaperChase database (GO PAPERCHASE) or IQuest (GO IQUEST).

—Cathryn Conroy



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Computer Safe Guards Liberty

A product of high-tech computer security is protecting a part of our country's history.

A safe originally designed to protect computer media against dust, fire, water, humidity, theft and magnetic disturbance is being used to store the records of the 1986 Statue of Liberty centennial celebration, according to *Government Computer News*. The air-tight and fire-resistant computer media time capsule will safely store the documents for 100 years.

Displayed above ground at the Museum of the Statue of Liberty, the safe contains video recordings of messages from the president and the secretary of the interior to their counterparts and the American people in the year 2086.

The capsule also contains a video of the Liberty weekend celebration, photographs of the restoration, and audio tapes of interviews with immigrants and refugees.

Big Production

A study by *Ward's Business Directory* shows that Apple Computer is the most productive American computer manufacturer in terms of sales per employee.

Apple Computer, according to the analysis, leads in employee revenue production with $339,600 per worker. Commodore International is second with $296,400 per employee. The other Top 10 companies are:

3. Compaq Computer—$284,200 in sales per employee
4. Cray Research—$149,200
5. Tandem Computers—$134,300
6. Amdahl—$134,200
7. IBM—$127,000
8. Intergraph—$106,300
9. Prime Computer—$99,800
10. Control Data—$97,300

More information is available from Information Access Co., 11 Davis Dr., Belmont, CA 94002; 800/227-8431.

College Knowledge

Selecting a college from the nearly 2,000 four-year schools and 1,340 two-year institutions in the United States and Canada is not easy. Glossy promotional brochures and thick college catalogs are of little help.

Peterson's Guides publishes a software program designed to assist students in making the decision. Peterson's College Selection Service identifies colleges with programs of interest to a student.

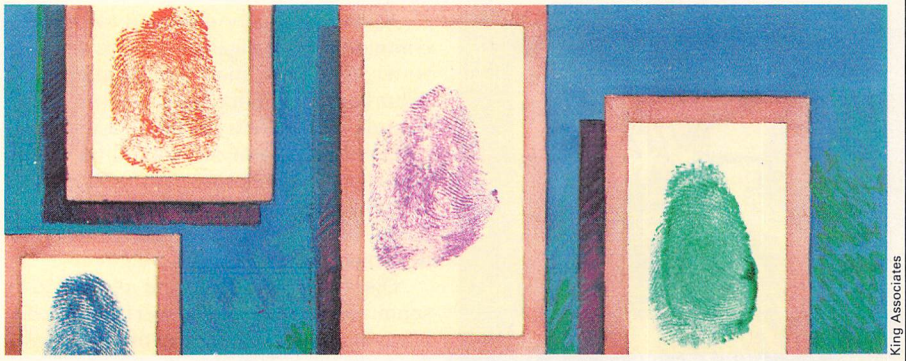
The menu-driven program eliminates colleges from the pool according to the student's responses to 20 selection criteria, including location, type of student body, campus setting, costs, majors, admissions requirements and policies, and campus life. In addition, the program has an index of majors that can help make students aware of the range of study and available career paths.

Students use the AND/OR technique to find the right school. For instance, a college offering a computer science major *and* a women's volleyball team can be requested. If the student questions why a particular college is not in the final list, the program offers a unique "why not?" feature to explain the exclusion. A new "snapshots" feature lets you see key facts about any of the colleges in the file.

The College Selection Service is available for four-year colleges ($159) and two-year colleges ($109) or combined ($188) for the Apple II series, the IBM PC, PC-XT and IBM PS/2. The price for the PC-XT version is slightly higher.

For information, contact Peterson's Guides Software Sales, 166 Bunn Dr., P.O. Box 2123, Princeton, NJ 08543-2123; 800/EDU-DATA.

Personal advice from students already attending many US colleges is also available electronically in the Students' Forum (GO STUFO).



King Associates

High-Tech Touch in Fingerprinting

While robots cannot dust for fingerprints (yet), a North White Plains, N.Y., company has developed a computerized device that can scan and store fingerprints.

The unit, developed by Fingermatrix, scans each finger and stores the resulting images in its memory, effectively doing away with ink, paper and other messy paraphernalia. The images can be sent to a laser printer to create fingerprint cards. According to Fingermatrix, the computer-generated fingerprint cards are almost impossible to smudge, unlike the cards created using the standard inking and rolling method.

Fingermatrix claims its system can be used to control and supervise visitors entering prisons, detention centers and other secure facilities. When an individual first visits such a place, the device scans his or her finger to extract minutiae, such as the points where fingerprint edges end or fork. These details are then stored in a secure file of authorized visitors. When the visitor leaves, his or her finger is scanned again for comparison against the fingerprint file. If the prints don't match, the guards investigate the situation (and most likely hit the sirens and searchlights).

Conrad Banner, a former FBI special agent, believes Fingermatrix's system is the wave of the future. "You have always heard about automation that 'garbage in means garbage out.' Inked prints are garbage."

More information is available from Fingermatrix Inc. at 914/684-0555.

Telecommunications Urged for Non-Profits

Many non-profit organizations have been slow to fully use new—and expensive—computer and communications technology, according to the Consumer Interest Research Institute in a report urging the use of telecommunications for the public sector.

Speaking for non-profit organizations, the authors say, "We must be willing to think big in these relatively early days of telecommunications services. We have an obligation not only to explore their use in our own work and to help our constituents use them effectively but also to help define the direction in which these services should proceed and how some of the policy issues which we have discussed must be resolved."

Contained within the report are chapters on electronic-mail services, information retrieval and databases, electronic bulletin boards, electronic conferencing, electronic publishing, computer-based telecommunications, cable-based telecommunications and telephone-based telecommunications.

Copies of the publication are available at nominal cost. More information is available from CIRI at 202/333-6035.

—James Moran

No Ozone Zone

It has been widely reported that the Earth's ozone layer is being rapidly depleted by fluorocarbons, a substance used in refrigerators, air conditioners and certain manufacturing processes. As ozone continues to disappear from the atmosphere, scientists expect cases of skin cancer and other maladies to rise significantly.

The computer industry is playing an important role in this drama—albeit a negative one. Fluorocarbons are commonly used in cleaning processes throughout the electronics industry, particularly in the manufacture of computer chips. With production at record levels, chip makers are using fluorocarbons in ever-increasing quantities.

But AT&T, with the help of Petroferm, a Fernandina Beach, Fla., research company, has developed what it considers to be a safe and effective substitute for Chlorofluorocarbon-113, the most common chip cleaner.

The compound, called BIOACT EC-7, is a natural solvent derived from oranges. It is a biodegradable, nontoxic product that is actually safe enough to drink in small quantities (the substance was initially developed as a flavoring and perfume agent).

Currently, BIOACT EC-7 can be used to clean only those electronics products that can be immersed in water during manufacturing. According to AT&T, some electronic components may need to be redesigned to take advantage of the water-soluble technology, which it will market to the electronics industry worldwide.

Overall, the company expects BIOACT EC-7 to drastically reduce CFC-113 use. And AT&T will be one of its own best customers. In 1986, the company used approximately 3 million pounds of CFC-113, and the company hopes to replace much of its current chlorofluorocarbon use with the new compound.

Complete details are available from AT&T Microelectronics at 201/771-2826.

—John Edwards

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Online Today Daily Edition's Monitor section keeps you abreast of the latest computer and information industry news. Stories are added several times each day and the hot items are highlighted on our front page, OLT-1. A week's worth of recent news is always available for review (OLT-20). To read today's news, type GO OLT-90 at any CompuServe Information Service prompt.

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GO OLI or circle 4 on the Reader Service Form.

Control Codes Speed Navigation

If you want to control your time on CompuServe, you'll want to learn the value of control characters.

Most commands on CompuServe must be followed by pressing the Return or Enter key. Pressing this key signals CompuServe that you have finished issuing your command and that you expect CompuServe to execute it.

It is a little different with control codes. When you send a control code from your computer to CompuServe, it's a signal for CompuServe to take action immediately. Control codes must be sent in a special way, usually by holding down the Control key on your computer while you tap a letter key.

Most computers manufactured today have Control keys, but earlier models may not have one. However, nearly all computers allow you to simulate a Control key by pressing other keys. If there is no Control key on your computer, check the manual for your terminal software to determine how you can create a Control key code on your computer.

It is important that you hold the Control key down while pressing the letter key. If you press the letter key first, CompuServe will simply recognize the letter and not the control character. Thus, if you wish to send a [CONTROL-C] command, press the Control key first and, while pressing it, tap the C key.

Once the two keys are pressed in this sequence, CompuServe instantly recognizes the command, without your pressing the Return key. Control codes are often called "interrupt" codes because they are often used to interrupt what's going on between your computer and CompuServe.

Following is a list of the most important control codes CompuServe recognizes and the ones you should use to get the most out of the system.

- [CONTROL-C] could be called a "parachute" of sorts since it is the ultimate interrupt. No matter where you are on CompuServe, a [CONTROL-C] will take you to a system prompt. New users take great comfort in this since they have a tendency to get lost. If you are in a conference area or the CB Simulator, [CONTROL-C] will take you back to a recognizable prompt quickly.
- [CONTROL-U] deletes any line you are typing, even while you are in a conference or on the CB Simulator, or any command or command string you have typed. [CONTROL-U] must be sent before you press the Return key to execute the command.
- [CONTROL-V] redisplays the line you are typing. This one is particularly helpful when you are participating in a busy free-for-all conference when many people are typing messages at the same time. In that situation, the message you're typing may appear to be broken by intervening messages from others. It can be confusing, although when the message is sent it will be reassembled by CompuServe before others see it. But, if you want to see what you've written before pressing the Return key, press [CONTROL-V] and it will be displayed to you the way it will be sent.

King Associates

- [CONTROL-H] is the same as a backspace key. If your computer terminal program allows you to use one of the keys on your keyboard to backspace, you can forget about this one. However, if there is no way to backspace with one computer key, you can use this to backspace one space each time you enter it. The character may not disappear from your screen, but the letter is no longer recognized by CompuServe.
- [CONTROL-A] and [CONTROL-S] temporarily suspend output from CompuServe to your computer, but each works a little differently. [CONTROL-A] suspends or "freezes" output at the end of the current line. [CONTROL-S] suspends output immediately. These two control codes are particularly good for reading scrolling text that is not set to stop after a page fills the screen.
- [CONTROL-Q] resumes output after you have used [CONTROL-A] or [CONTROL-S].
- [CONTROL-O] stops the output to your screen, whether it is a textfile scrolling by or a program being executed. Unlike the use of [CONTROL-A] and [CONTROL-S], the output cannot be resumed. [CONTROL-O], for example, is good to use to interrupt the result of the /Users command on the CB Simulator. After you've seen as much of the list as you care to, you can enter a [CONTROL-O] to be taken back to the channel chatter. When reading a textfile entry from a menu, [CONTROL-O] will take you to the end of that textfile immediately, allowing you to skip the remainder.
- [CONTROL-P] is similar to [CONTROL-O], but it interrupts the output and takes you to a command prompt. When reading a textfile that has several pages, a [CONTROL-P] will take you to the end of that page. Since [CONTROL-P] will always take you to a prompt, users will probably be more comfortable with it.

David Peyton co-authored How to Get the Most Out of CompuServe *and* CompuServe for IBM PC Power Users. *His CompuServe User ID number is 76703,244.*

Read Online Columns

When you want to read opinions behind the latest computer and information industry news, turn to *Online Today Daily Edition's* Columns. You'll find insights, witticisms, user tips and more by leading computer journalists. To read any of the columns, type GO OLT-110 at any CompuServe Information Service prompt.

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Beginner's Corner	OLT-140
Behind the Screens	OLT-130
Calendar of Events	OLT-1000
Columns by Gutman	OLT-175
Online with Bowen	OLT-3500
Uploads Updates	OLT-3700

Using EasyPlex with Ease

CompuServe generally has two modes of operation: novice (*menu*) mode, in which most of the alternatives are outlined on screens of numbered options and expert (*brief*) mode, characterized by short prompts and fewer menus.

Usually, a subscriber selects one of the modes by setting options in the Profile area of the system (GO PROFILE). It is advisable to stay in the default menu mode until you are thoroughly familiar with the system.

In addition, as an earlier column has noted, you also may make temporary changes with the Set command at any prompt. For instance, typing SET BRIEF ON at any prompt turns on the expert (*brief*) mode, while SET BRIEF OFF returns the user to menu mode. Any changes made this way are in effect for only the current session; when you log off and log on again, you're returned to the mode you've saved as your default in the Profile area.

Beyond this, the EasyPlex electronic mail system actually has three modes of operation: menu, command and prompt, an intermediate setting. These modes are controlled by a special EasyPlex Set command, which also handles a few other details, such as switching from the line-numbered editor to the non-line-numbered editor.

New users see EasyPlex from menu mode:

```
******************************
EasyPlex Main Menu
1 READ mail, 3 messages pending
2 COMPOSE a new message
3 UPLOAD a message
4 USE a file from PER area
5 ADDRESS Book
6 SET options
Enter choice!
******************************
```

(If you do not have messages waiting, Option 1 will be replaced with ***No mail waiting***.)

As with other menus on the system, all of the functions can be controlled by numbered alternatives (such as, 2 to compose a letter). Notice that Option 6 is EasyPlex's own Set command, which calls up a second menu:

```
******************************
EasyPlex Options Menu
[ ] Represents Current Setting
   (yes/no options toggle)
1 EDITOR uses line numbers [YES]
2 MODE of operation is [MENU]
   (MENU, PROMPT, COMMAND)
3 Output is PAGED [YES]
Enter choice!
******************************
```

As this menu suggests, two of these options (1 and 3) are "toggles," a familiar concept to most computerists. A toggle, like a light switch, is either on or off, yes or no. In this context, if an option currently set to "yes" is selected, it then is reset to "no" and vice versa.

Options 1 and 3 here are straightforward:

- The first lets you toggle from the line-numbered editor to the non-line-numbered editor for the composing of EasyPlex messages. (These are the same online editing programs used on forum message boards, known to forum users as SED, the line-numbered editor, and EDIT, the non-numbered editor.)
- Option 3 concerns the display of messages you receive, deciding whether they are paged. If your output is paged, the display of your EasyPlex message will stop (for an "Enter command of ⟨CR⟩ for more!" prompt) when the text fills your screen, depending on your terminal type and terminal settings. If you'd like, you may set this Paged option to "off."

Of the three options on this menu, number 2—MODE—is the new concept. If you select Option 2, you see:

```
******************************
EasyPlex Mode Menu
1 MENU—(Novice User)
   List of choices in menu form.
2 PROMPT—(Intermediate User)
   Brief list of commands.
3 COMMAND—(Expert User)
   One word prompt.
Enter choice!
******************************
```

In menu mode, the introduction of the EasyPlex feature always looks as it does in our first example. In addition, other levels of EasyPlex (such as the editing features and the mail-posting options) are displayed as menus. However, if you switch to the intermediate prompt mode, you don't receive a menu upon arrival in EasyPlex, but this:

```
SCAn, REAd, COMpose, ADDress or HELp!
```

Or if you selected the command mode, your prompt is more brief, appearing as:

```
EasyPlex!
```

Subsequent functions in EasyPlex—such as the Action menu and the Send menu—also are abbreviated in the prompt and command modes.

The point to remember in using these advanced prompts is that anything you can do from a numbered menu, you also can do from an abbreviated prompt. All you have to do is type in the lettered command.

For instance, if you want to compose a message at either of these prompts, you type COMPOSE (or COM; only the first three letters are required). Similarly, if you want to look at waiting messages, you may type READ or REA at the menu or prompt. Furthermore, if you suddenly develop a mental block and forget what options are open to you at one of these abbreviated prompts, type HELP or a question mark (?) and the system lists them.

The advantage of using advanced modes is saving time; you're not asking the system to construct all those menus for you. On the other hand, you won't save time if you move on to them too soon, only to find yourself sitting at the prompt and scratching your head. For that reason, it's a good idea to advance at a reasonable pace, from menu to prompt mode, then from prompt to command mode.

And let menu mode help you learn the letter commands. EasyPlex's menus can accept either numbers or letters at the prompt, so get in the habit of typing COM rather than 2 at the main menu. Then when you're ready to move up to abbreviated prompts, COM already will mean compose to you.

Some people are reluctant to experiment with advanced modes of EasyPlex because they're afraid they'll get trapped in prompt or command mode and be unable to get back to the menus. Don't worry: For one thing, EasyPlex asks you to confirm most major changes with the message "Make changes permanent for future EasyPlex sessions? (Y or N)!". In addition, if you find yourself in prompt or command mode and want to go back to menu mode, simply type SET MODE MENU at an EasyPlex prompt.

One more thing about EasyPlex: CompuServe occasionally adds new capabilities. From time to time, you should type NEW at the main EasyPlex prompt to be brought up to date.

Charles Bowen is a contributing editor of Online Today. *His CompuServe User ID number is 70007,411.*

An Analytical Approach to Investment Decisions

by Mike Pietruk

To deal with the thousands of stocks, bonds and mutual fund investment opportunities, many investors depend on the advice of brokers, advisory newsletters and daily periodicals. Professional money managers and analysts take a more systematic investment approach by relying on sophisticated analytical programs and databases—systems often beyond the financial means of the average investor. CompuServe subscribers have an advantage: SCREEN and COSCREEN.

SCREEN uses data from the MicroQuote II historical database to analyze thousands of security issues—stocks, bonds (both corporate and municipal as well as debt of US government agencies), mutual funds, market indexes and even options. Covered are all of the major US exchanges, most of the regional ones, and those traded in Toronto and Montreal. Using a series of menus, SCREEN allows you to search and narrow your selection set until you have a final group of issues displayed. At each step, you will be notified of the "number of issues found" meeting your criteria and offered the opportunity to continue, redo the last search, start screening again, exit the program or report the issues found meeting your search parameters.

Recently I put SCREEN to work looking for income stocks that might be good, long-term conservative investments. I began the search by asking for common stocks trading on the New York Stock Exchange. This preliminary information took me to the heart of SCREEN, where I was asked for the investment characteristics that I wanted to search. The criteria available are broad in scope:

1 SIC Code
2 Shares outstanding (000s)
3 Amount outstanding (000s)
4 Open interest (contracts)
5 Earnings per share
6 Indic. Annual Dividend
7 Maturity date
8 Bond coupon rate
9 Exercise price
10 Expiration date
11 Latest price
12 P/E ratio
13 Current yield (%)
14 Yield-to-maturity
15 Moody's rating
16 S&P rating
17 Beta coefficient
18 Cash ex-dates
19 Stock ex-dates
20 Date of 52 week high
21 Date of 52 week low

Continuing to focus on income and long-term growth, I chose the dividend yield and the price/earnings ratio (options 12 and 13). After I entered those numbers, the system prompted me to type in any of the following "operators" to define the two variables:

LT n less than value of n
LE n less than or equal to n
GT n greater than value of n
GE n greater than or equal to n
EQ n equal to n
NE n not equal to n

By scanning for stocks with a dividend yield greater than 5 percent and a p/e ratio of less than 10, I reduced the original 10,218 stocks and 1,676 NYS listings to a more manageable list of 97. Wanting quality stocks, I next narrowed the list to six by specifying a high Standard and Poor's rating.

Finally, I requested a report. Prior to its display, I was told that the surcharge would be $6.50 ($5 for the report plus 25 cents per issue) and was asked if I would prefer output directly to my screen or saved in my MicroQuote II personal file area in one of the four available information formats.

Note that unless you request a report, you are not charged for the search you perform. Therefore, unless you are happy with the criteria you selected and the number of issues it provided, you can exit the search without incurring transaction charges. I viewed the six issues found and produced a report in my terminal.

COSCREEN takes a different approach to the analysis. Where SCREEN sifts through data on different types of securities, COSCREEN searches fundamental financial data on the companies. COSCREEN retrieves information from Disclosure II's files of approximately 9,000 firms. Combined with MicroQuote II previous-day closing prices on common stocks, screening is performed on the most up-to-date information available.

Screening may be done on any or all of 24 criteria:

1 SIC Code
2 State
3 Total Assets
4 Book Value
5 Market Value
6 Sales
7 Net Income
8 Cash Flow
9 Latest Price
10 4 Yr Growth Rate-Sales
11 4 Yr Growth Rate-Net
12 4 Yr Growth Rate-EPS
13 Debt/Equity Ratio
14 Market/Book Ratio
15 Current Ratio
16 Return on Assets
17 Return on Equity
18 Return on Sales
19 Earnings/Share
20 Cash Flow/Share
21 Price/Earnings Ratio
22 Yield
23 Price Position
24 Price Volatility

Like SCREEN, COSCREEN is menu-driven using the same functional operators. Additionally, the command /H will bring definitions of the 24 searchable criteria, along with an occasional useful hint or two. As with SCREEN, you can always cancel a search, restore a previous set, and try "if" and "when" possibilities without incurring any surcharges until the optimal list is created. You can then have the report printed to the screen or saved as a ticker file in your financial file area for later viewing or use with the QQUOTE Current Quotes or MicroQuote II services. As with Screen, you are informed of all surcharges ($5 for the report and 50 cents per issue) before you decide to produce a report and be billed.

Both programs give investors powerful tools to make the selection of stocks and bonds less haphazard. While they should not be the only tools used, when combined with other forms of analysis, they help make the investing procedure more systematic.

COSCREEN and SCREEN are available to CompuServe Information Service subscribers with the Executive Option and may be reached by typing GO COSCREEN and GO SCREEN respectively. If you are not an Executive Option subscriber and wish to learn more or join, type GO EXECUTIVE.

Mike Pietruk is a forum administrator of CompuServe's Investors' Forum and an assistant vice president of Preferred Savings & Loan in Chicago. His CompuServe User ID number is 76703,4346.

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ONLINE TODAY

EasyPlex Makes Telex Connection

by Carole Houze Gerber

Businesses and individuals needing to communicate via Telex now can use EasyPlex, CompuServe's electronic mail service, to send messages anywhere in the world. Using EasyPlex, subscribers can communicate with more than 2 million Telex terminals.

"The most frequent users are businesses needing to send messages overseas. Electronic mail is not nearly as widespread in Europe, and many companies there still rely solely on Telex machines," says Cheryl Martin, CompuServe product specialist. Two-way communication is another plus to this service, because subscribers can receive Telex messages directly into their EasyPlex mailboxes.

The cost for sending a 300-character message to a domestic Telex machine is 60 cents if sent to a Telex I machine or 65 cents if sent to a Telex II (TWX) machine. The cost of Telexes sent to foreign countries is set by the country of destination. This charge will be displayed after your message is composed but before it is sent, so that, if you wish, you may cancel the message.

To send a Telex using EasyPlex, first determine the number of the receiving Telex machine. Then access EasyPlex by typing GO EASY at any prompt. Once in EasyPlex, type HELP TELEX at the main EasyPlex prompt for step-by-step instructions for sending your message. If your message is being sent overseas, you will need to know the three-digit country code where the Telex machine is located. For a directory of all country codes, type HELP TELEX SEND_COUNTRY_CODES (or just HELP TELEX SEND) at the main EasyPlex prompt.

Then compose your message using any of the three EasyPlex compose options. The command required to send an EasyPlex message to a domestic Telex machine is >TLX <machine number> <answerback>—for example, >TLX 1234567 ABCDEF.

The command required to send an EasyPlex message to a foreign Telex machine is >TLX <country code> <machine number> <answerback>—for example, >TLX 7891234567 ABCDEF. The country code is 789, the machine number is 1234567 and the answerback is ABCDEF.

The > character before TLX is essential to sending your message. An answerback is optional. It is a confirmation code used to verify that you are sending your message to the correct Telex machine. If you use an answerback, it must be complete for the message to be delivered. If you do not know the answerback of the Telex machine to which you are sending your message, it is best to omit it. Whether or not you use the answerback option, you will receive a confirmation message when your Telex message is delivered.

To send a Telex message to your EasyPlex mailbox, the sender will need to know your EasyPlex User ID number and CompuServe's Telex number, which is 3762848. For you to receive a message sent from a Telex machine, the first non-blank line of the message must contain the words "TO: EASYPLEX:" followed by your User ID number—for example, TO: EASYPLEX:70001,1234. CompuServe's answerback, is COMPUSERVE.

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Trust Your Investments to an Online Servant

by Carole Houze Gerber

Creating a ticker input file to track your investments is a convenient, cost-efficient way to obtain maximum information at minimum costs. Instead of repeatedly logging into various databases to follow your investments, you can set up a ticker input file and save time and connect charges by turning the tracking over to an "online servant."

The file can be used in most programs accessing Quick Quote and MicroQuote II databases, including Current Quotes, Pricing History-I Issue and MQDATA. It can also be personalized to achieve compatibility with most spreadsheet packages.

Once set up, your ticker input file can be used repeatedly throughout the day to track quotes for stocks and options, which are available online with a 20-minute delay throughout the trading day. In addition, if you also follow particular money market fund yields, foreign currency exchange rates or mutual fund net asset values, you can run a separate ticker input file nightly after 6 p.m.

To create your own ticker input file, simply type GO MQUOTE and carry out the following instructions, which will appear on your screen:

****Mquote II!****

After the exclamation point, type EDIT and you will be prompted for the name you want to give your ticker input file (for example, INVEST.DAT). After you type in the filename and press the Return key, the system will tell you that the new file has been created. At this point, you simply type in—one line at a time—the ticker symbols of the stocks you are following. You can enter up to 500 ticker symbols or CUSIP numbers. If you don't know the ticker symbols, you can look them up in the Issue/Symbol Lookup Menu (GO SYMBOLS).

When your list is completed, type /EXIT and you will receive the Mquote II! prompt again. Now type GO QQUOTE. To check the prices of your stocks in the Current Quotes database, type @INVEST.DAT (or whatever filename you have given your ticker input file) at the Issue prompt.

In addition to the most recent price, you will be presented with the company name, volume, high and low prices, change and time of the last update of each stock listed in the file. The ticker input file can now be used as often as you wish. You need only type GO QQUOTE and @FILENAME.EXT (at the Issue prompt) to again check on stock quotes. You can easily add or delete stocks via the Edit command in Mquote. (Use the Filge editor to do this.)

To personalize your ticker input file to make it compatible with a Lotus 1-2-3 spreadsheet package, use the /OUTPUT command to place data in a file with the extension .PRN (such as /OUTPUT= INVEST.PRN) for use in your worksheet. Within Edit, type /T, then /OUTPUT=INVEST.PRN. Then type /EX.

Price quotes received by a .PRN import file will automatically be stored as variable length format, with commas between the items and quotation marks around the ticker symbols. This can be verified by running INVEST.DAT through Quick Quote, creating the INVEST.PRN output files, then entering TYPE INVEST.PRN at the Mquote II! prompt. To transfer this information into your Lotus worksheet, download the file you created, using CompuServe's file-transfer program (GO FILTRN), and make sure you retain the extension as .PRN. Then enter your Lotus worksheet and type the /FIN (file import numbers) command.

In addition to this formatting, the Current Quotes database can customize the data to reduce each field to the minimum number of characters needed to represent the data and place quotation marks around text fields or specify the number of digits of precision.

A detailed list of these and other commands, along with complete instructions for their use, is available online in Quick Quote's introductory menu. To read the information, type /H at the Issue prompt. First-time users will probably want to download and print the information for future reference.

Business Briefs

Irma and SmartAlec Supported Online

Digital Communications Associates' products Irma and SmartAlec are now supported in the Crosstalk Forum managed by DCA/Crosstalk Communications.

Support for Irma is available in Subtopic and Data Library 12. Support for SmartAlec is available in Subtopic and Data Library 13. GO XTALK

NewsGrid Provides Headline News and Market Updates

Headline news, market updates and keyword search of current news are available through NewsGrid on the CompuServe Information Service.

NewsGrid features news and information on key business topics captured from leading news wire services. Each day more than 200 stories enter the NewsGrid database, and each story is assigned five to 10 keywords by NewsGrid editors. GO NEWSGRID

Novell Netwire Available

NetWire, Novell's online support service that provides current Novell product and corporate information, is available on CompuServe.

Subscribers can download continually updated program files, including operating system and shell drivers, utility program patches and fixes.

The Novell Forum and the Technical Bulletin Database have an $8-per-hour surcharge. The product and company information areas have no surcharges. GO NOVELL

New Software Publishers Online

Two new software publishers, Publishing International and Palm Beach Technologies, are offering their products in SOFTEX, CompuServe's expanding online software catalog.

Publishing International of Sunnyvale, Calif., offers its Byte Size line of quality, low-cost software for the IBM PC and compatible computers.

Palm Beach Technologies of Palm Beach, Fla., has introduced its most recent version of Key-Stroke One, a complete program management system for IBM and compatible computers. GO SOFTEX

Borland Expands Support

Borland has opened Subtopic and Data Library 9 to support its new Reflex Plus for the Macintosh.

Within this new data library, subscribers can download a demonstration for Reflex Plus. GO BORAPP

Origins of a Medical Guide

Dr. Bleich Tells How PaperChase Came to Life

by Cathryn Conroy

Dr. Howard Bleich will insist, when pressed, that all he was trying to do was get organized. And that, he will tell you, is how PaperChase—a user-friendly version of the complicated Medline database—began.

The year was 1967 and Bleich had arrived at Boston's Beth Israel Hospital to begin practicing medicine and to serve as an instructor at Harvard Medical School. He wanted to better organize his personal collection of some 12,000 article reprints he had filed in Manila folders. With that many articles, he found it difficult to quickly locate the one he needed. With the help of computer programmers, he began what he originally thought would be a personal database of his own library.

Before he had even completed the program, however, various colleagues heard about his work and asked if their articles could be included. Soon the project began to grow—to some 400,000 references—and Bleich realized it was time to move the database into the hospital's medical library.

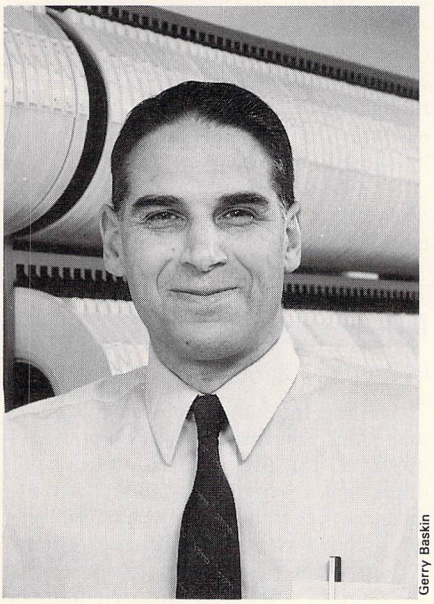
He received a grant from the National Library of Medicine for more computer power and programmers. "Things grew and eventually it became the full Medline database," he says. "PaperChase started from the difficulties one researcher had using his own collection of materials."

During 1979, PaperChase's first year of operation, 1,032 medical students, house officers, practicing physicians and others, without formal instruction or a users manual, conducted some 8,500 searches and displayed nearly 400,000 references. Clearly, there was a need for the database.

Although it took several years, Beth Israel Hospital programmers expanded the database from the holdings of the hospital library to include the entire Medline database. But PaperChase differs from Medline in one special way: ease of use. Where Medline access requires librarians trained in online retrieval, PaperChase requires only a user with a need for information. It is so simple to use that Beth Israel is often given the credit for rewriting the book on searchable databases. PaperChase is also the least expensive way to access the information found in Medline.

PaperChase offers all of the material indexed and abstracted for Medline dating back to 1966, including more than 5 million references from some 3,400 journals. Each month, an additional 25,000 references are indexed and abstracted.

Searches can be conducted by title words, medical subject headings and subheadings, author's name, journal title, year of publication, language of publication and Boolean combinations of any of these. A series of questions helps the user in the search, and online and telephone help is available. Abstracts can be displayed and printed, although their contents cannot be searched.



Gerry Baskin

Operating PaperChase: *Bleich*

With the success of PaperChase, Bleich and his partner, Dr. Warner Slack, with the assistance of Beth Israel Hospital, Brigham and Women's Hospital, and the Harvard Medical School, began the Center for Clinical Computing, of which PaperChase is now a part.

Under Bleich and Slack's direction, 1,800 computer terminals have been placed in all the nursing stations and other strategic locations at Beth Israel and Brigham and Women's Hospitals. In addition to providing free and unlimited access to PaperChase, the system is used for patient information. The traditional patient charts are still used, but these are updated only every 24 hours. The computerized patient charting system, however, is updated when anything changes, so lab results, for instance, can be instantly retrieved. This has had powerful ramifications, completely changing the education of medical residents.

"When I was a resident, I felt like a thalamus [that part of the brain that relays messages to the rest of the body] with a pair of legs," says Bleich. "I spent my time running from the lab to radiology and back to the lab, chasing information needed by senior physicians so they could teach me what needed to be done next for a patient. This was necessary to practice medicine in an intelligent way. Someone had to do it, and it was the intern's job. But now, our residents get that same information from the terminal and spend their time in more professionally useful ways."

Because Bleich's residency experience is still typical in most hospitals today, the Center for Clinical Computing has made Beth Israel and Brigham and Women's Hospitals two of the most desirable locations for a medical residency.

In addition to eliminating the need for residents to wear Nikes, the terminals provide unlimited access to PaperChase—unheard of in other hospitals. And the students take advantage of it, using it to verify references or to locate obscure papers. Searches are done to skim recent reviews before presenting a patient on morning rounds or even to explore rare clinical relationships between illnesses and medications.

Although Bleich points out that a direct correlation cannot be drawn, he is proud that the residents of these two hospitals consistently score in the 98th and 99th percentiles of the section of the national medical boards that tests residents at the end of their clinical training. "The training they receive in a hospital is relative to how well they do on this test," he says.

PaperChase is still growing. Usage is increasing substantially, and Bleich and his colleagues are working to make searching more useful and productive. "It is a never-ending process," he says. "Or, at least, the end is not close."

To access PaperChase, type GO PAPERCHASE at any prompt on the CompuServe Information Service.

Cathryn Conroy is a contributing editor of Online Today. *Her CompuServe User ID number is 70007,417.*

A Communicator's Menu Takes Shape Online

by Michael Naver

CCWORKS (CompuServe for Communicators Works) puts hundreds of professional and ancillary services together in one easy-to-use menu. It's a help to writers, editors, public relations, marketing and advertising specialists—in short, anyone who communicates with the public.

"CompuServe has a wealth of information and resources for the professional communicator," notes Ron Solberg, forum administrator of the Public Relations and Marketing Forum and the originator of CCWORKS. "The new menu pulls together important elements for the newcomer and helps to organize the material for easy access."

Solberg says he finds CCWORKS helpful as a demonstration tool in talks to PR groups and classes. "It's much easier to reference a menu of services than to talk about individual products," he says.

Of the 10 menu items, three lead you to CompuServe user forums of particular interest to communicators. They are the PR and Marketing Forum, media forums and computer forums.

The PR and Marketing Forum (GO PRSIG) is a major gathering place for public relations practitioners, whether in non-profit or in corporate PR. It offers specialized data files, conferencing and an extensive message board.

Options 2 through 5 point you to four information areas: IQuest, demographics, Executive News Service and AP Online.

IQuest is a comprehensive information and reference gateway to more than 900 publications, databases and indexes spanning the worlds of business, government, research, news, entertainment and sports. IQuest is menu-based, prompting you for your information needs, then going to work to fill them by accessing such online services as Dialog, BRS, NewsNet, Vu/Text and others.

Or, if you need demographic research, choose SUPERSITE, neighborhood (ZIP code) reports, Business Demographics, CENDATA or US/State/County reports from Option 3, demographics.

The fourth option is the Executive News Service, CompuServe's electronic news clipping service. ENS gives access to the Associated Press national news wire, the Reuters Financial Wire, *The Washington Post,* OTC NewsAlert and McGraw-Hill News. ENS enables you to create your own customized clipping folder and then does the rest, searching for and "clipping" news for you to read when you log on.

The next option on CCWORKS is AP Online, which provides concise coverage of national, international, business and sports news.

The last group of CCWORKS services is familiar to most CompuServe users. They're included in CCWORKS so communicators can handle related business needs without leaving that menu.

For example, EasyPlex, your CompuServe mailbox, allows you to exchange messages with hundreds of thousands of electronic-mail subscribers, and with any Telex and TWX machine in the world.

The Travel selection offers information about air travel, car and hotel bookings, tours, cruises and passport procedures. The Financial Data option leads you to company information, market quotes and other financial services. The last two options, media forums and computer forums, lead to menus of forums that may interest professional communicators.

Seeing the CCWORKS menu each time you log onto CompuServe is easy to arrange. When you log on, type GO OPTIONS, select "log-on actions" and define "CCW-1" as your first menu. Or, set your computer software to GO CCWORKS as part of your auto log-on procedure.

More information about the offerings of CCWORKS is available in a "help" file in the PR and Marketing Forum. From any prompt, type GO PRSIG, answer "yes" to the membership question, and then select Data Library 4 to read the file CCWORK.HLP. You'll be on your way to becoming a more effective communicator.

Microsearch: Connection to Computer Literature

by Matthew Burns

Getting the facts is not always easy, particularly in the world of computer products. But Microsearch can make a difference. Microsearch links you to a database containing more than 20,000 product reviews culled from more than 200 microcomputer-related publications. Add to that product literature from more than 4,500 manufacturers and software publishers, and you have a remarkably powerful research tool.

You don't need a master's degree in library science to find what you want in the database. Microsearch makes it easy to locate product reviews and literature. You specify criteria using menus, and Microsearch searches its database for entries matching your criteria. When it is finished, you can view the entries or further refine or expand your search.

The Microsearch database is divided into three sections: software information, hardware/services/accessories information and a directory of manufacturers. The software information section contains product reviews and literature on all types of software, including business/professional, games, educational, scientific and health-related programs. The hardware/services/accessories information section has product reviews and literature on all types of microcomputers and related products and services. The directory of manufacturers provides company names, addresses, contact names and, when available, toll-free company telephone numbers.

Let's say that you're looking for a word processing program for the IBM PC-AT. First, type GO MSH at any prompt to access Microsearch. This menu will appear on your screen:

```
MICROSEARCH
1 Introduction/Search Tips
2 Software Information ($)
3 Hardware, Services, and Accessories
  Information ($)
4 Directory of Manufacturers($)
5 Feedback
Enter choice !
```

To search for reviews of word processing programs, select Option 2, "Software Information."

Microsearch responds by displaying this menu of search criteria:

```
Search Software By:
1 Subject
2 Micro or Operating System
3 Product Name
4 Manufacturer
5 Publication
6 Date
7 Document Type
Enter choice !
```

You can search the database by

subject, name of microcomputer or operating system, product name, name of manufacturer, name of publication, date review appeared in a publication (or date literature was abstracted) and document type (product review or product literature).

You could choose "Subject" or "Micro or Operating System" to begin your search. Let's say you select the latter. Microsearch then displays this prompt:

Enter Micro or Operating System:

Type IBM PC-AT here. After searching the database, Microsearch displays the number of entries it found related to the IBM PC-AT and then this menu:

Next Action
1 Display Selected Titles
2 Narrow Selection Set
3 Expand Selection Set
4 Begin New Search
Last menu page, enter choice !

Now select Option 2, "Narrow Selection Set." Again, Microsearch displays its criteria menu. Although this is the menu you saw before beginning your search, it now applies only to those entries contained in your current selection set.

Select Option 1, "Subject," and type "word processor." Microsearch then reviews the entries it found about IBM PC-AT computers, looking for entries that are also related to word processors.

When it is finished, Microsearch again displays the number of entries selected, followed by the Next Action menu. If you feel the selection set is too large, you can narrow it by specifying additional search criteria. For example, if you're interested in the spell-checking feature of word processing programs, you could narrow the selection set by selecting "Subject" and then typing "spell check."

Or maybe you're partial to reviews that appear in a favorite publication. In this case, select "Publication" and then type the name of the publication you're looking for.

Selection sets can be expanded, too. For example, if you want a word processing program with a thesaurus, at the Next Action menu, select "Expand Selection Set." Again, Microsearch responds by displaying its criteria menu. Select "Subject" from this menu, and then type "thesaurus."

When you're ready to view the selection set entries, select "Display Selected Titles" from the Next Action menu. Microsearch then prepares and displays a menu of titles from which you choose the individual product reviews or literature you wish to read.

Because Microsearch carries a surcharge of $10 per hour to search the software, hardware and manufacturers sections, preparing a strategy before searching the database can save you time and money.

Microsearch offers a variety of information to help you construct a pre-search game plan, including search tips, a subject thesaurus, and indexes of microcomputers and publications covered in the database. To view this information, select Option 1, "Introduction/Search Tips," from the Microsearch menu.

Matthew Burns is an associate technical writer at CompuServe. His User ID number is 76003,660.

MARK YOUR CALENDAR!

for
AT&T'S LIVE CONFERENCE
on
TELECOMMUNICATIONS & COMPUTER TECHNOLOGY FOR THE DISABLED

Thursday, May 26th
8:00 PM EDT

with
Ron Hatley from
The AT&T Special Needs Center

Find out what AT&T has to offer. Tell us your ideas on these significant innovations.

GO CONVENTION on the 26TH

GO ATT for more information now!

AT&T
The right choice.

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GO OLI or circle 6 on the Reader Service Form.

IBM Keyword Search Solves Dilemma

by Paul Newkirk

Searching for a way to save subscribers time and money led the leaders of the IBM forums to try something new: keyword-searchable databases.

Before asking a question on the message board of the IBM forums, subscribers can check the keyword-searchable database and, in many cases, find the answer right away. For example, if other subscribers have asked questions about how to install a specific program on the IBM PC, those questions and responses would be stored by keyword. The next person with the same question could retrieve the information from the database instead of leaving a question on the message board, thereby getting the information immediately. In addition, a keyword-searchable database can offer the "historically best" response to commonly-asked questions rather than random responses that a subscriber would find on the message board.

The keyword-search technology also benefits forum members by reducing

Greg Miller

Key in searchable solutions: *Baker*

the "scroll rate" on the message board. A problem in the past was the frequency of repeat questions. Since the message board has a limited number of message slots, the oldest messages would start scrolling off the board when the capacity was exceeded. The amount of time a message stayed on the board could be as little as three days, depending on the forum's activity level. This was a problem for subscribers who accessed the system only once a week; by the time they reached the forum, the question and responses could be gone. The amount of time a message stays on the board also dictates how much time is allowed for responses. If a message stayed on the board for three or four days, it might not receive as many responses as it could.

To address these problems, Don Watkins, IBM forum administrator, and Sharon Baker, CompuServe's manager of forum products, collaborated on the creation of the keyword search product for IBM forum members. Watkins had stored all of the IBM forum messages on his hard disks and wanted to make the information easily accessible to fellow IBM users.

The IBM keyword database will be separate from the forums but accessible from the IBM menu. Messages or articles included in the "archive" will be assigned keywords. To keep costs down for subscribers, Watkins and Baker have carefully edited the messages to be included in the archive.

Whether you're looking for answers to questions or technical bulletins, your search may end at the new database in the IBM forums.

WordPerfect Available to Macintosh Users

by Dan Janal

Macintosh might be a machine ahead of its time, but its users have had to wait until this year before they could use WordPerfect, the best-selling word processing program of all time.

Now that a Mac version has been released, users are not only discovering the program's power and flexibility, but they are also realizing that they need more than a manual to guide them to proficiency. Mac users are finding out what thousands of CompuServe users have known for a long time—expert advice is available from CompuServe's WordPerfect Support Group Forum (GO WPSG).

The forum offers fast answers to thorny problems about using WordPerfect. The message board and data libraries are filled with tips and tricks that aid users of all versions of WordPerfect, including MS-DOS, Apple II, Amiga, Atari, Digital Equipment's VAX and Data General.

The forum, which is not affiliated with WordPerfect Corp., also supports other WordPerfect products, including PlanPerfect (spreadsheet), Library (a set of utilities and a shell), DataPerfect (database), WordPerfect Executive (a laptop version of several products) and Repeat Performance (keyboard speed-up utility).

"Our forum has been successful. People have been overwhelmingly positive and pleased with it," says Sandy Wilkes, forum administrator. "Questions are answered almost immediately, and our members share their techniques and experiences."

The forum is active. On one recent night, more than 200 messages were posted for Wilkes and other experts—her husband, Richard Wilkes, the technical editor for WPSG who has used the program since 1982; Joan Friedman, a forum administrator; and John Mancini, an assistant on the forum.

The forum is as informative as it is lively. It isn't unusual to find Pete Peterson, WordPerfect's executive vice president, answering members' questions and comments and writing what he calls "Bedtime Stories" about the company.

"He has been on the forum almost nightly," says Wilkes. "He has been extremely responsive to suggestions, and many of the changes and improvements in the IBM version were based on suggestions he received in the forum. He called the forum members his 'honorary design committee'."

"They've been helpful," Peterson says, tongue-in-cheek. "Too helpful."

Peterson says the CompuServe connection has been a great way for the company to get news to its users. "We knew well in advance of fall 1987 that we were not going to be able to deliver WordPerfect 5.0 in time for a Comdex release. Rather than keep that fact a secret, it seemed a good idea to tell the reasons why the 5.0 release would be later than expected," he says. After trade publications turned down his request to write a series of articles, he approached the forum. "It was a lot of fun (and a lot of work) writing 30 lines each night for about three months."

WPSG members and Peterson have benefited from the give and take. "When I have a new idea or need to make a decision, I like being able to think out loud on the forum and get an immediate response from a large group of customers," says Peterson. "I don't think our costs (for support) are reduced, but the level of service is certainly improved."

PC Vendor Forum Strengthens Support

by Cathryn Conroy

The PC Vendor Support Forum is growing by leaps and bounds. What started as three companies offering online support for their products has expanded to 10 software and hardware manufacturers.

The newest companies online are Laser Friendly, Custom Technologies, Magee Enterprises, Knowledge Garden, Mustang Software, Toshiba America, Foresight, Fox Software and MathSoft.

Prior to his participation in PC Vendor, Marshall W. Magee, Magee Enterprises' president and owner, gave technical support for Automenu through EasyPlex and the IBM Software Forum. "Many users enjoy the access that they have to me: 'Ask the author—he always knows the answer.' I find that many users like support through words. Public support helps show that we plan to be around awhile, an important factor in the minds of our corporate customers," Magee says.

But the advantages of online support don't end there. Magee says that having the users help one another with problems is helpful to everyone.

Tim Bougan, Custom Technologies president, finds the forum a better alternative than setting up his own bulletin board system. "Many more people can access it simultaneously," Bougan says. "Electronic support is better than phone support, since it gives our technical staff time to reflect on the problems. In addition, the answers can be read by anyone with similar questions."

Since Bougan's firm is a shareware company, he uses the forum as an avenue for the distribution of evaluation copies of programs. "Our goal is to promote not only our products but also the concept of shareware as a viable alternative to commercial software," Bougan says.

Some of the many software and hardware items supported in the PC Vendor Support Forum include:

- PC-File+:, a database manager from ButtonWare Inc.
- KEDIT, a text editor for the IBM PC from Mansfield Software Group.
- ENABLE, a five-function integrated product for the IBM PC from The Software Group.
- The Office Publisher, an electronic publishing program from Laser Friendly Inc.
- Automenu, a program from Magee Enterprises that makes it easier to use complicated DOS commands.
- CheckMate, a computerized checking account manager from Custom Technologies.
- KnowledgePro, a communications tool from The Knowledge Garden.
- Wildcat!, a bulletin board system from Mustang Software.
- T1200, a battery-powered laptop computer from Toshiba America Inc.

To visit or join the PC Vendor Support Forum, type GO PCVEN.

Microsoft Forum Splits, Multiplies Service

by Brian Monahan

Since it is virtually impossible to spend much time with personal computers without using Microsoft products, it is not surprising that the Microsoft Forum is one of the popular forums on CompuServe—so popular in fact that it has been split in two to better meet the needs of subscribers.

CompuServe now offers the Microsoft Applications Forum (GO MSAPP) and the Microsoft Systems Forum (GO MSSYS). In addition, the Microsoft Connection (GO MSOFT) provides company information and access to both forums. The Microsoft forums, like other CompuServe forums, offer message boards, data libraries and conference modes. The applications forum covers information on items other than programming languages and operating systems. The products supported in this forum include Excel, Word and Works for the IBM PC and the Macintosh.

The systems forum covers languages and operating systems. Support is available for DOS, OS/2, C, Quick C, BASIC, Quick BASIC and XENIX. Information about Microsoft Windows is available in both forums. Those looking for windows applications graphics, for example, will find them in the applications forum. Those using the Windows Development System will be more interested in the systems forum.

The Microsoft area on CompuServe is especially valuable because it allows users to communicate directly with Microsoft. Most administrators on the forums are Microsoft employees. Those employees are supplemented by "Microsoft assistants" who have technical expertise with one or more Microsoft products.

Most questions receive a response within a few hours, seven days a week. (Forum Administrator Runnoe Connally reports that he gave most staff members Christmas off, but he himself signed on. According to Connally, "There's always someone around.") The response a user receives will usually solve the problem, although there may be times when the question will be forwarded to a technical expert at Microsoft. Those who answer questions have access to the latest product and language information. News of updates, fixes and suggestions reaches them first.

The data libraries on both forums contain a variety of templates, and non-commercial software is available for downloading. In the systems forum, one of the most frequently downloaded programs is one that converts Turbo Pascal programs to Microsoft C. (This can be found in Data Library 3 of the forum.) In the applications forum, users find it useful to download printer drivers for Microsoft Word, Excel and Windows. The administrators and others on the forum can direct users to free software that will meet their needs.

Besides Microsoft employees, you'll find many experienced users in the forum. No matter which Microsoft product you have a question about, there is probably a user on the system who has solved the problem or who can point you in the right direction. In addition to finding solutions to problems, those logging onto the forum will find useful suggestions for improving the performance of languages and applications packages.

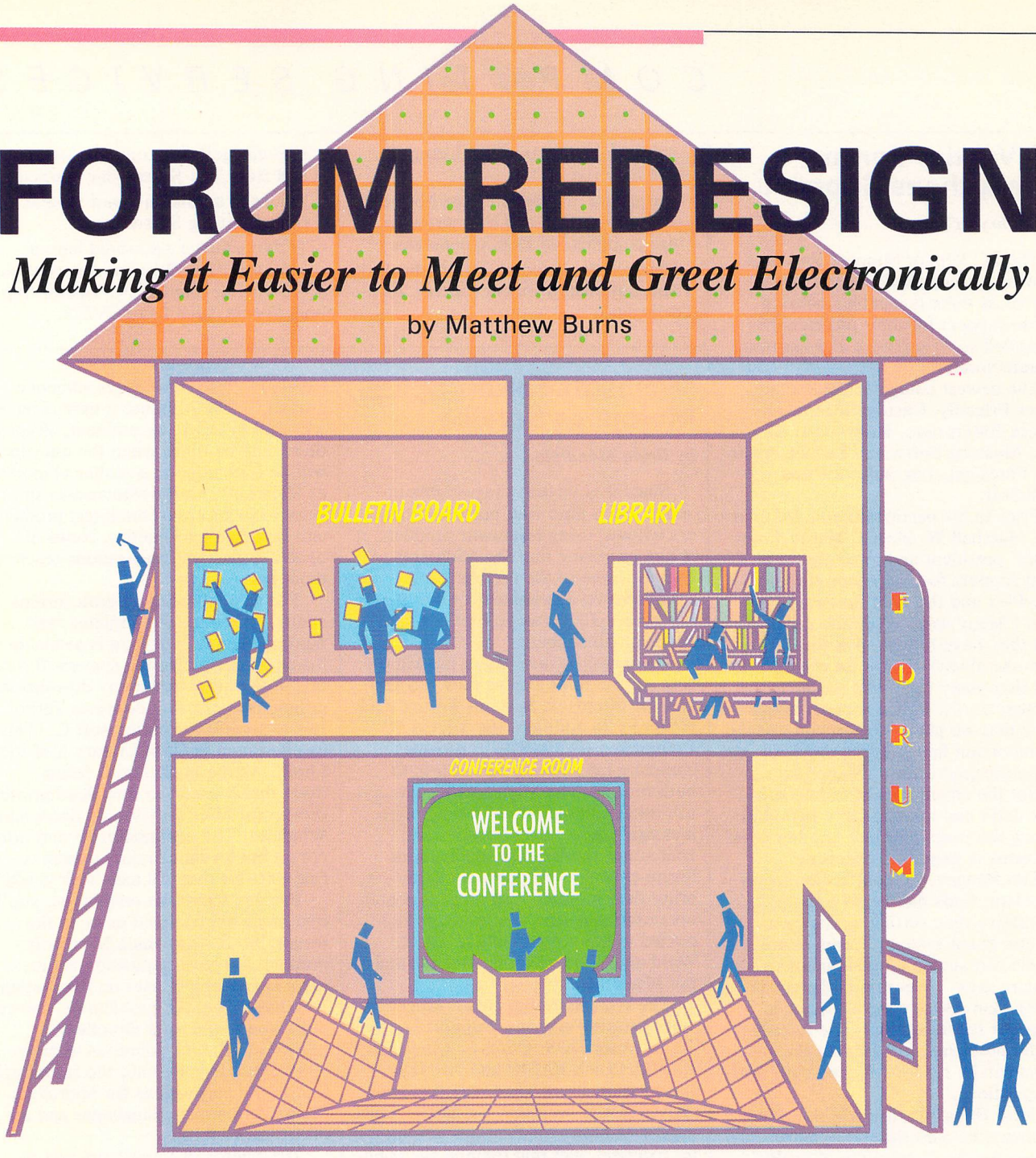
The Microsoft forums provide an excellent alternative to telephone support. Many users prefer leaving a message on a forum and returning in a few hours for an answer to waiting on the phone even a few minutes to make a connection with telephone support personnel. In addition, forum support is available any time, so there are no worries about calling during West Coast business hours. Those answering questions on the forums have training and experience similar to that of telephone support personnel.

The Microsoft Connection, Microsoft Applications Forum and Microsoft Systems Forum can help you to get the most out of your Microsoft products.

FORUM REDESIGN

Making it Easier to Meet and Greet Electronically

by Matthew Burns



Artists Only

One way to be in the know is to be in a forum. Join a forum and you tap into a network of people and resources. CompuServe offers more than 150 forums, each dedicated to a special interest.

Although a complex combination of hardware and software operates behind the scenes, it is people who bring life to a forum. From owners of Apple computers to connoisseurs of Zinfandel wines, people gather daily in the forums to share information. The forums' dynamic, interactive environment fosters a special camaraderie. Professionals and hobbyists alike enjoy the casual atmosphere found in each forum. No neckties or business cards.

And now CompuServe has made it easier for people to join hands electronically in a forum. In the fall of 1986, CompuServe kicked off a forum redesign project to identify the needs of potential and existing forum members, and to modify the software that runs the forums to better meet those needs. "From the start of the project," says Donna Black, forum product specialist, "we had a good idea of changes subscribers wanted to see in the forums."

Day-to-day contact with the members and administrators—or sysops—of forums, coupled with subscriber feedback to CompuServe's Customer Service, helped to shape the new software throughout the project.

As the redesign project proceeded, CompuServe turned to randomly selected panels of novice and experienced subscribers (known as focus groups) for reviews of the new software. "We set up checkpoints during the project where we stopped to ask people how we were doing. Based on what they told us, we went back and made changes to the software as necessary," says Black.

To ensure that changes to the soft-

ware benefited the most people, CompuServe polled people with varying degrees of familiarity with using forums. A group of people who used microcomputers but didn't use CompuServe previewed the new software. Similarly, groups of experienced forum users were queried. These groups helped CompuServe to identify strengths and weaknesses in the new forum software.

CompuServe associates involved in the redesign project faced the ongoing challenge of changing the forums' user interface (menus and commands, for example) while keeping the overall function of the forums intact. "Subscribers and sysops told us they liked what they could do in a forum," explains Gary Yeauger, forum software programmer.

Efforts were directed toward producing commands that would be intuitively meaningful to forum members and menus that would better reflect the full complement of a forum's resources.

Over the past few months, CompuServe released the new software to select forums, including one that only forum administrators can access. This previewing and testing period—required of all revised products before they go "live" on the information service—has helped CompuServe iron out last-minute wrinkles in the new forum software.

The early release of the software to the forum administrators is an important step in the redesign project. "CompuServe is fortunate to have sysops who are excellent testers and teachers," says Black. "Our sysops have a proven track record for testing new software and fielding questions from members on how to use the new software."

Now that research and testing is complete, the new forum software is running in all of CompuServe's forums.

Menu changes are among the most visible. In particular, CompuServe reconstructed the menus used to find, read and compose messages. "Menu choices are now more descriptive," says Yeauger, "and the arrangement of menus follows an order that people found to be most logical."

Don Watkins, an administrator of the IBM Users Network, agrees. "I remember that it took me a long time to figure out what the choices on forum menus meant. I think the new menus will make it easier for newcomers to find things in a forum."

The new forum menus are more similar to those of other services offered on CompuServe. Subscribers will find that many skills they developed using other CompuServe services can be applied in the forums.

Greg Miller

Experts work to simplify electronic environment: *Yeauger and Black*

CompuServe also "standardized" commands so their effects in a forum are the same as elsewhere on the information service. "Entering a B at a prompt in a forum now does the same thing as entering a B at most prompts on CompuServe," says Yeauger, "It displays the previous page."

In addition, CompuServe has implemented several commands that subscribers can use anywhere in a forum, enabling them to go directly to different areas of the forum. INSTRUCTIONS, MESSAGES, LIBRARIES, CONFERENCING and OPTIONS are a few of these new forum-global commands.

"Overall, we feel the new forum software will make it easier for people to get up to operating speed in a forum," says Yeauger.

Yeauger also anticipates that people will find it easier to advance from novice (menu) mode to expert (command) mode. Each forum menu choice contains its equivalent forum command in uppercase letters. Entering a forum command has the same effect as selecting the corresponding menu option. Thus, using a forum in menu mode is in itself a tutorial for using a forum in command mode.

The new forum software offers other amenities that can save subscribers time. For example, forums now automatically display related messages sharing the same subject in "thread order." "Thread order is the easiest way to read messages," explains Yeauger. "It makes reading messages like following a conversation."

Members who frequent a particular area of a forum can take advantage of another new forum feature—a user-definable forum Top menu. The new forum software lets members specify which of four menus (Functions, Messages, Libraries, Conference) appears on their screen when they enter a forum.

Members who use a forum mainly to read and post messages, for example, can start at the Messages menu each time they access that forum. "Again, our intent was to make CompuServe's forums meet the needs of subscribers," says Yeauger.

Finding and joining a forum

New to CompuServe's forums? Relax. Forums carry a long-standing tradition of welcoming new members and making them feel at ease. And with the new forum software, you'll find it's easy to connect with other forum members through messages, library files and conference-room conversations.

To find and join forums that match your interests, first type GO FORUMS

at any prompt. CompuServe will display a menu that shows the different types of forums offered:

```
1 Aviation Forums
2 Education Forums
3 Science/Technology
4 Entertainment/Games Forums
5 Financial Forums
6 Hardware Forums
7 Media/Electronic Publishing
8 Home/Health/Family Forums
9 Professional Forums
10 Software Forums
11 Sports Forums
12 Travel Forums
Enter choice !
```

Next, select a category. CompuServe displays a menu of specific forums related to that category. Simply select a forum.

After you make a selection, a welcome message appears on your screen, followed by a menu that looks like this:

```
Forum                    Functions Menu
1 INSTRUCTIONS
2 MESSAGES
3 LIBRARIES (Files)
4 CONFERENCING (5 participating)
5 ANNOUNCEMENTS from sysop
6 MEMBER directory
7 OPTIONS for this forum
8 JOIN this forum
Enter choice !
```

This is a forum's Functions menu. To join the forum, select Option 8. After you do, it will no longer appear on that forum's Functions menu.

While it is possible to visit a forum without joining it, visitors are typically restricted in their access to the forum's resources. As a member, however, you'll have full access to all public areas of the forum.

It usually costs nothing to join a forum. Only a few forums carry surcharges—and those tell you about the dues before you join. In addition, joining a forum does not place you under any obligation to use it.

Feel free to join as many forums as you like. As a starting point, you may want to join a forum dedicated to the hardware or software you use. Many subscribers feel more comfortable turning to a CompuServe forum for support than contacting their computer dealer or manufacturer.

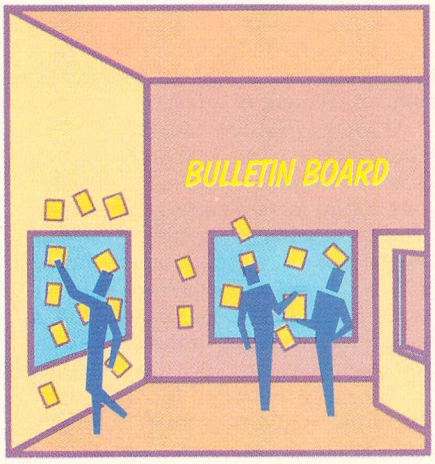
Accessing a forum

Once you become a forum member, CompuServe displays a forum's Functions menu each time you access a forum:

```
Forum                    Functions Menu
1 INSTRUCTIONS
2 MESSAGES
3 LIBRARIES (Files)
4 CONFERENCING (5 participating)
5 ANNOUNCEMENTS from sysop
6 MEMBER directory
7 OPTIONS for this forum
Enter choice !
```

This is a forum's main menu. It is a home base of sorts. From it, you can access each of a forum's main areas including:

- **Instructions**. Option 1 takes you to a menu of online forum instructions. To access this menu from anywhere within a forum, type INSTRUCTIONS.
- **Message board**. Members correspond with one another via messages on the message board (Option 2). There you can find person-to-person notes, answers to questions and ongoing discussions. You can post your own messages and read messages posted by other members.
- **Libraries**. Option 3 takes you to resource areas containing programs and textfiles. Here you can find articles, professional reports, news, reviews and transcripts from online conferences. You can read these materials online or download them to your computer. You also can find a variety of useful software programs (public domain, shareware and freeware) that you can download and add to your personal computer software library.
- **Conference rooms**. Option 4 takes you to areas where members gather online for "live" conversations. Here members engage in unscheduled chats, regularly scheduled meetings or participate in special conferences with guest speakers.
- **Announcements**. Special notices posted by the administrator are reached through Option 5. They help you learn more about a forum and keep you informed of changes in each part of a forum.
- **Member directory**. An online directory containing the names, User ID numbers and interests of forum members who chose to be listed is found in Option 6.
- **Options**. Option 7 enables you to change the way your computer interacts with a particular forum. Here's where you can specify whether you use menu mode or command mode, and which of four menus (Functions, Messages, Libraries, Conference) appears on your screen when you enter a forum.



Reading messages

A forum's message board is divided into sections. Each section contains messages relating to a particular topic. For example, in a sports forum one section might contain messages about sailing, while another might contain messages about skiing.

CompuServe offers several ways of finding and reading forum messages. One way is through "selecting" messages. Selecting messages enables you to pinpoint messages that interest you. It takes a few menus before you actually read messages, but you'll be assured you haven't missed anything of interest.

The menus give you an overview of the types of messages available—that is, what people are talking about. As you step through the menus, you continue to narrow the topic and tap into a specific message "thread."

To get an idea of how this works, let's look at an example. First select

Option 2 from the Functions menu. CompuServe displays this menu:

```
Forum                    Messages Menu
Message age selection = [New]
1 SELECT (Read by section and
subject)
2 READ or search messages (2
waiting)
3 CHANGE age selection
4 COMPOSE a message
Enter choice !
```

Select Option 1. CompuServe responds by displaying a menu of section names:

```
Forum                    Sections Menu
Section names (# subjs/# msgs)
2 Help (21/55)
3 Question of the Week (5/29)
4 Vegetable Gardening (17/49)
5 Ornamental Gardening (2/3)
6 Nutrition (4/20)
7 Plant Talk (3/6)
8 Book Reviews (3/4)
Enter choice(s) or ALL !
```

Notice the two numbers that appear in parentheses to the right of each section name. The number of subjects (# subjs) refers to the number of message threads in a section. The other number is the total number of messages within a section (# msgs).

The Nutrition section (Option 6), for example, contains 20 messages. Each message in that section belongs to one of four message threads.

Select a section from the Sections menu. CompuServe then displays a menu of subjects:

```
Forum                    Subjects Menu
Subject (# msgs)
Section 6—Nutrition
1 Vitamins (11)
2 Minerals (2)
3 Proteins (1)
4 Calorie Counter (6)
Enter choice(s) !
```

Option 1, for example, enables you to read the messages in a thread about vitamins. This thread contains 11 messages.

Now you're ready to select a subject. You can select either a single choice, a series of choices (separate them with commas) or all of the choices (type ALL). After you make your selection, CompuServe displays the messages in the order they appear in the thread.

In addition to selecting messages, you can find messages sent to or from the person whose name or User ID number you specify, or messages having the subject, message number or age that you specify. To do this, select Option 2 from the Messages menu.

```
Forum                    Messages Menu
Message age selection = [New]
1 SELECT (Read by section and
subject)
2 READ or search messages (3
waiting)
3 CHANGE age selection
4 COMPOSE a message
Enter choice !
```

After you select Option 2, CompuServe displays a Read menu:

```
Forum                    Read Menu
Read
1 [NEW] messages
2 Message NUMBER
3 WAITING messages for you (2)
Search [new] messages
4 FROM (Sender)
5 SUBJECT
6 TO (Recipient)
Enter choice !
```

All options on the Read menu enable you to read messages. Each option, however, offers a different way of finding or specifying the messages you read.

- **[NEW] messages**. Option 1 displays new messages available to you in the order they appear in a message thread.
- **Message NUMBER**. Option 2 displays a message whose number you specify.
- **WAITING messages**. Option 3 displays messages posted to you that you have not read yet. (The number of unread messages waiting for you appears in parentheses next to this menu choice.)
- **FROM (Sender)**. Option 4 displays messages posted by a person whose name or User ID number you specify.
- **SUBJECT**. Option 5 displays messages having the subject you specify.
- **TO (Recipient)**. Option 6 displays messages posted to a person whose name or User ID number you specify.

After reading a message

At the end of each message, CompuServe displays this prompt:

```
Press <CR> for next or type CHOICES !
```

To read the next message, press the Return key. If you type CHOICES, CompuServe displays a menu that looks like this:

```
Forum                    Read Actions Menu
1 REPLY with same subject
2 COMPOSE with new subject
3 REREAD this message
4 NEXT reply
5 NEXT SUBJECT
6 READ reply
7 DELETE this message
8 Subjects menu
9 Sections menu
Enter choice !
```

- **REPLY to this message**. Option 1 enables you to compose and post a message in response to the message you just read and to keep the same subject. (This attaches your reply to the existing message thread.)
- **COMPOSE with new subject.** Option 2 is like Option 1, except that you can enter a new subject and start a new message thread.
- **REREAD this message**. Option 3 redisplays the message you just read.
- **NEXT reply**. Option 4 displays the next message in a thread.
- **NEXT SUBJECT**. Option 5 skips unread messages in the current message thread and displays the first message in the next message thread.
- **READ reply**. Option 6 displays a reply to the message you just read. (This option only appears on the Read Actions menu if someone has posted a reply to the message you just read.)
- **DELETE this message** Option 7 deletes the message you just read. (This option only appears if you posted the

message or if the message is posted to you.)

- **SUBJECTS menu**. Option 8 returns you to the Subjects menu.
- **SECTIONS menu**. Option 9 returns you to the Sections menu.

Changing 'message age' selection

CompuServe added "message age" as another tool to help members find messages. "Message age selection" enables you to specify—by age—the messages you can read using Option 1 (Select messages) or Option 2 (Read or search messages) from the Messages menu.

To view a menu of message ages or to change the message age selection, select Option 3 from the Messages menu:

```
Forum                    Change Menu
1 [*] NEW messages
2 [ ] ALL messages
3 [ ] STARTING message number
4 [ ] Number of DAYS
Enter choice !
```

Let's take a brief look at the choices that appear on the Change menu.

- **NEW messages**. Option 1 gives you access to only new messages. New messages are those posted since you last entered a command or selected a menu choice to read messages.
- **ALL messages**. Option 2 gives you access to all public messages, regardless of their age.
- **STARTING message number**. Option 3 gives you access to all public messages having a message number greater than or equal to the message number you specify.
- **Number of DAYS**. Option 4 gives you access to all public messages posted within a specified number of days.

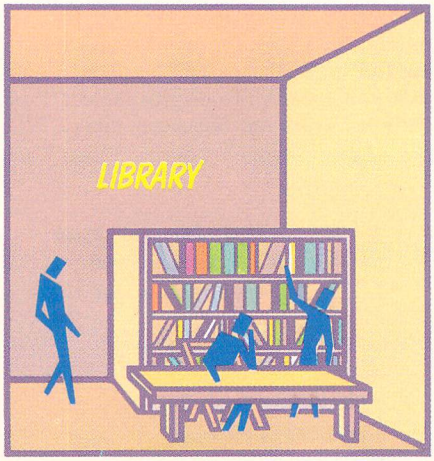
An asterisk (*) appears beside your current message age selection.

Let's say you want to read only messages posted within the last five days. When you select Option 4 from the Change menu, CompuServe displays this prompt:

```
# of days:
```

Here you would type 5.

Two points to keep in mind: First, the change lasts only for your current forum session. Once you leave the forum or log off CompuServe, your message age changes back to NEW. Second, your change limits (except when your message age is ALL) the messages you can find in a forum. Searching for messages with the subject scuba, for example, would now yield only messages with the subject scuba posted within the last five days.



Finding files in a library

A forum can have up to 18 libraries. Typically, each library offers files containing information related to a particular subject. In a computer-specific forum, for example, one library might contain files about printers. Another library might contain files about software.

To choose a library, select Option 3 from the Functions menu. CompuServe then displays a menu of library names. The menu might look like this:

```
Libraries Available:
1 New Uploads
2 Help
3 Laser Printers
4 Desktop Publishing
Enter choice !
```

Select the library you wish to access. If you select Option 4, for example, CompuServe displays a menu like this:

```
Library 4
– Desktop Publishing –
1 BROWSE thru files
2 DIRECTORY of files
3 UPLOAD a new file
4 DOWNLOAD a file
5 LIBRARIES
Enter choice !
```

To find a file, select Option 1 from the Library menu. CompuServe displays this prompt on your screen:

```
Enter Keywords (e.g. modem) or ‹CR› for all:
```

Here you should type one or more keywords, or press the Return key, which instructs the system to search for all files.

If you are looking for files related to a specific subject, you can enter that subject as a keyword. Instead of browsing through all of the files in the library, you will browse only through those having the keyword(s) you entered. You can enter more than one keyword, but be sure you use a space or a comma to separate each one.

Next, CompuServe displays this prompt on your screen:

```
Oldest files in days or ‹CR› for all:
```

Here you should enter a number of days or press the Return key. For example, if you type 10, you will browse only files submitted to the library in the last 10 days. After you complete this step, CompuServe displays the header of the first file it finds with the keywords and the age you specified. CompuServe then displays this prompt:

```
Press ‹CR› for next or type CHOICES !
```

To see the header that describes the next file, press the Return key. If you type CHOICES, this menu appears on your screen:

```
Library                  Disposition Menu
1 READ this file
2 DOWNLOAD this file
3 RETURN to Library Menu
Enter choice or ‹CR› for next !
```

READ this file. Option 1 displays the file on your screen.

- **DOWNLOAD this file**. Option 2 downloads the file to your computer.
- **RETURN to Library menu**. Option 3 takes you back to the Library menu. This generally is the first menu you see when you enter the library.

Conferencing

A forum can have up to 18 conference rooms. Recall from the Functions menu that Option 4 looks like this:

4 CONFERENCING (12 participating)

In this example, 12 members are in conference. They may be in one large conference or in several smaller ones.

To access a conference room, select Option 4 from the Functions menu. CompuServe then displays a menu of up to 18 conference room names. Simply select the room you wish to access.

Suppose you access conference room 18. CompuServe then displays a message that looks like this:

```
Welcome to room 18, Matt
Entering conference room...
Key /HELP for assistance
```

If you're familiar with the CB Simulator or forum conferences, you'll know where to go from here. If not, here are a few tips to get you started:

- To find out who is in a conference room, type /USTATUS.
- To send a one-line message, simply type it and press the Return key. No one can see a line you have typed until you press the Return key.
- To redisplay a line you are typing on your screen, press [CONTROL-V].
- To change the way your name appears in the forum, type /NAME followed by the name change (/NAME Jack, for example).
- To move to another conference room in a forum, type /ROOM #, where # is the number of the room you want to move to.
- To exit a conference and return to the Functions menu, type /EXIT.
- To view a list of commands you can enter in a conference, type /HELP.

The following cues help fellow conference attendees know when to jump into the conversation and when to wait:

- To indicate that there is more to your message, type an ellipsis (...) at the end of your line.
- To indicate your message is complete, type GA (short for "go ahead") at the end of your line.

Many forums hold regularly scheduled conferences each week. To find a complete listing of these conferences, type GO OLT-120.

Getting Help

CompuServe offers several ways you can get help in using a forum, including:

- **Online instructions**. A forum's Functions menu offers instructions as an option. Select this option for general help information or an online users guide and reference card. In addition, when you type HELP or ? at almost any prompt in a forum, you get information specific to that part of the forum.
- **Library help files**. Many forums set aside part or all of a library for files that contain helpful information. One file might offer tips on downloading files, while another might offer shortcuts for reading messages. Look for a library section named HELP or files with the file extension HLP.
- **Sysop**. Feel free to ask the forum administrator questions. Besides knowing where everything is in a forum, a sysop is usually a resident expert on the forum's subject matter. To ensure that an administrator reads your message, post it to SYSOP. To make your message invisible to all but the primary administrator, post it to *SYSOP.
- **Customer Service**. You can browse a section of common questions about forums (GO QAFORUMS), send Customer Service a question electronically (GO FEEDBACK) or call Customer Service for help.

You can also find explanations of any recent changes in the forum by typing NEW at the Functions menu prompt.

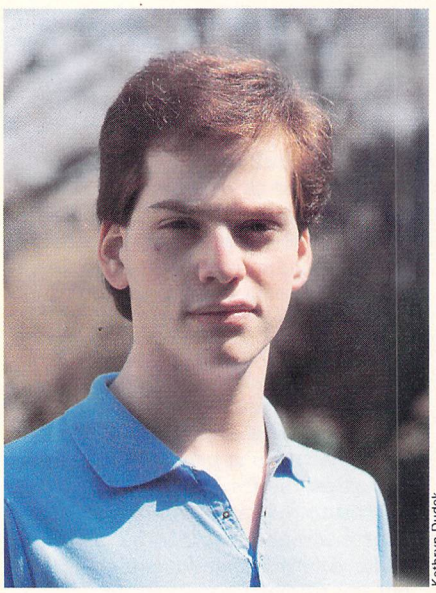
Now you're ready to get started exploring the new forum capabilities. Whether your interests take you to forums about artificial intelligence, model airplanes or investing, you're likely to find that it's now easier to meet and greet others electronically.

Matthew Burns is an associate technical writer at CompuServe. His CompuServe User ID number is 76003,660.

What's Going On?

If you want to know what's going on around CompuServe, check into *Online Today Daily Edition*. Here you'll find constantly revised news for and about the CompuServe community. GO OLT-50 from any prompt on the CompuServe Information Service.

ONLINE TODAY



Kathryn Dudek

Smooth transition: *Schoenbach*

New Forum Software Transition Simplified

As CompuServe rings in the new forum software, subscribers familiar with the old forum software may wonder where they stand.

CompuServe has taken special steps to ensure a smooth transition from the old to the new software for novices and experts, and to enable subscribers to learn at their own pace.

For starters, CompuServe will enable subscribers to run the old software for one year. To do this, simply append a semicolon followed by the letters OLDF to your User ID number when you log on. For example:

User ID: 76003,660;OLDF

You can also run the old forum software while you are in a forum by entering the OF command (short for Old Forum) at the Functions menu. To resume running the new software, type the NF command (New Forum) at the Functions menu.

In addition, CompuServe will continue to support all old forum commands that do not conflict with new forum commands.

Subscribers who use shareware programs, such as AUTOSIG or TAPCIS, to do much of their forum activities offline can continue to do so by appending ;OLDF to their User ID numbers. This will not be necessary in future versions of these programs.

Keep in mind that the hoopla over the new software is primarily over a new user interface. The functionality of the forum has not changed. Skills acquired using the old software will be almost entirely transferable to the new software. And, the new software offers features for seasoned forum users.

Among other time-savers, Mike Schoenbach, assistant forum administrator of the Atari 8-bit Forum, points out that it's now easier to find messages posted in the last couple of days. "With the old software, you had to search for the number of a message posted about two days ago," says Schoenbach, "Now all you do is enter the command REA DAY 2 and the forum does the rest."

To help members adjust to the changes in the new forum software, Schoenbach compiled a "conversion" table.

Forum Command Conversion Table

Old	New	Description
Reading a message:		
RTN	REA NEW	READs all NEW messages (thread order).
RN	REA FORNEW	READs all NEW messages beginning with the message whose number you specify. (FORward sequential order. For example, you specify message number 1, you would read message 1, then message 2, etc.)
RS;F	REA FRO:	READs all messages posted FROm the name or User ID number you specify.
RS;T	REA TO:	READs all messages posted TO the person whose name or User ID number you specify.
RS;S	REA SUB:	READs all messages with specified SUBject.
RM	REA WAI	READs all messages WAIting for you. (These are messages posted to you that you have not read before.)
L	COM	Places you in COMpose mode where you can compose a message.
B	ANN	Displays the ANNouncements menu. (Here's where you'll find a forum's bulletins.)
CO	CON	Takes you to the CONferencing menu.
DL	LIB	Takes you to the LIBraries menu.
R	MES	Takes you to the MESsages menu.
MD or V	MEM	Takes you to the MEMbership Directory menu.
IN	INS	Displays a menu of INStructions.
OP	OPT	Takes you to a forum's OPTions menu.
After reading a message:		
RA	RES	REReads (redisplays) a message.
RE	REP	Enables you to compose a REPly to a message you just read.
MA	MAR	Enables you to MARk messages.
RP	PAR	
RR	REA REP or REA	Shows the reply to the message you just read.
SK	NEX	Displays the NEXt message in a thread.
SKALL	NEX SUB	Displays the first message in the NEXt SUBject (thread).
After composing a message:		
S	POS	POSts a message.
S#	POS SEC:#	POSts a message in the SECtion whose number you specify.
SU	POS UNF	POSts an UNFormatted message. (Message is not formatted to screen sizes.
SU#	POS UNF SEC:#	POSts an UNFormatted message in the SEC whose number you specify.
C	EDI	Enables you to EDIt a message.
MA	MAI	MAIls a message to an EasyPlex mailbox.
P	PRE	Enables you to PREview a message. (This shows you how the message will look once it is posted on the message board.)
A	CAN	CANcels your message. (That is, erases it and does not post in on the message board.)

Tracing Threads

Message Board Conversations Identified by Subject

Within each section of the message board, messages are identified by subject. These messages form what is called a message thread. A message thread may consist of one message, or it may contain dozens.

Suppose, for example, that you are new to a forum and that you post a message having the subject HELLO. Since your message was not in reply to another message, it forms its own message thread. If someone replies to your message and retains the subject HELLO, the reply becomes part of your message thread.

Message threads make it easier to follow or participate in message board conversations, because CompuServe arranges the messages in the order they "fit" into a conversation.

To illustrate, suppose that Jerry posts a message having the subject TONIGHT'S CONFERENCE. Dan and Tammy reply to Jerry's message. Later, Sue and Don reply to Dan's message and Ben replies to Tammy's message. Figure 1-1 shows the relationship between the messages in the thread.

Figure 1-2 shows the order that the messages shown in Figure 1-1 would appear on your screen.

Jerry (1)
|
Dan (2)
|
Sue (3)
|
Don (4)
|
Tammy (5)
|
Ben (6)

Figure 1-2

The Anatomy of a Message

In addition to the text, each message includes information identifying that message.

Figure 1-3 is an example of a message.

The #532 appearing in the subject line shows that this message is a reply to message number 532. The # sign preceding the subject of the message (Vitamins) indicates there is at least one reply to this message. The X at the end of the recipient's User ID number indicates that he has read this message. This message also has two replies (message number 535 and message number 536).

Anatomy of a File

CompuServe attaches a header to every library file. Like a book cover, this header contains information that identifies the file. Here is an example of a file header: See Figure 1-4.

Information on the care and maintenance of video display terminals (VDTs). Includes tips on cleaning screens.

The name of this file is VDT.ARC. (Files with the extension .ARC are usually compressed files stored in a binary format.) It was submitted May 15, 1988, by the person whose User ID number is 76537,1553. The file has been accessed (read or downloaded) 42 times. The file contains 3,905 characters.

The person who submits the file supplies the filename, keywords and file description. CompuServe automatically inserts and updates the other information.

—MB

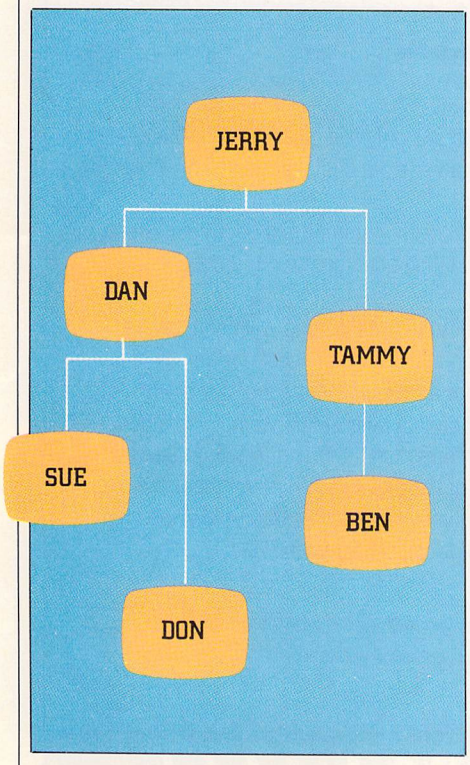


Figure 1-1

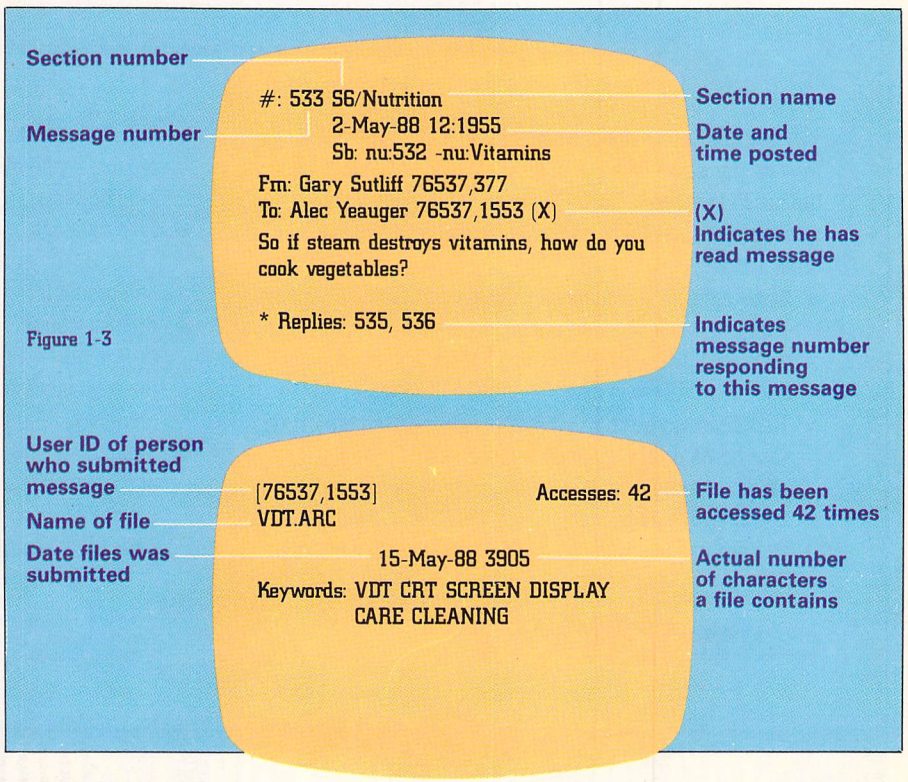


Figure 1-3

Figure 1-4

Shop OnLine
and lose the wait.

Sample the world's premier, and most complete on-line discount shopping service

You use your PC to make many chores quick and easy. Now do the same when shopping. Use Comp-u-store OnLine to buy over 250,000 name-brand products at savings of 10%—50% off the manufacturers' suggested retail prices!

- **User-friendly convenience** We're open 24 hours a day, 7 days a week. Browse online, order online and have your purchases delivered to your door. Simple menus and step-by-step instructions make it easy.
- **Tremendous selection** Without leaving the comfort of your home or office, compare makes and models, compare name-brands—best of all, compare prices!
- **Lowest price guarantee** If you can find a lower price on an item you buy from us, we'll refund the difference*.
- **Full warranties** We sell only top-quality, name-brand products, and all products are delivered with warranties in full effect.
- **Free catalogs** We'll keep you informed about our latest "Best Buys" and exciting additions to our database of fine products!
- **Special Notice** Comp-u-store OnLine will soon have a new name — Shoppers Advantage. Look for our ad in the next issue for an announcement about our grand reopening, and the on-line celebration we have planned.
- **Sign on for more information** Sign on to CompuServe and enter **GO CUS** or **GO SAC** to learn more about this unique service. To join, select Comp-u-store Membership from the Directory, or call **1-800-843-7777.**

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GO OLI or circle 9 on the Reader Service Form.

Go Mall

A GUIDE TO COMPUSERVE'S ELECTRONIC MALL® MAY/JUNE 1988

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MURDER AT THE MALL

Check Each Store For Clues

DEAR SHOPPER

Dear Shopper,

I knew her well. We'd worked together for more than three years. As Mall manager, she assisted countless shoppers. She lent a patient ear to your suggestions for new products and services, tracked down the rare lost order and helped you find what you were looking for online. Often, I would come into the office in the morning and find her slumped over her terminal, asleep in yesterday's clothes, exhausted from the demands of her dedication.

Her death was a heinous crime, and she will be missed.

I do hope you'll join us in our online search for the murderer. Scour the Mall for clues ... keep an eye peeled for weekly news bulletins ... scrutinize the Cast of Characters for things that don't quite wash. Should you be the first to solve the crime, we'll amply reward you with a $500 usage credit.

Detectives buy gifts, too.
While sleuthing online, why not also do some shopping?

Mother's Day. Father's Day. May graduations and June weddings. All have, once again this year, snuck up on us. To assist with your spring gift-giving chores, we've put together an electronic gift-giving guide with our suggestions. How about a hammock for dear old dad? Or a Cross pen set for that May grad?

Hit the highways ...
Come May, perhaps your thoughts turn to a stylish car and getting away in it. Why not fantasize a bit and view the new 1988 lines from Ford and Buick online? Get the low-down on costs and options for your dream car from Autoquot-R™. Then discover how buying or leasing may be much more affordable than you'd imagined through AutoVision or ABC Compu-Lease.

... or the airways.
A holiday is just keystrokes away. Plan now for a summertime trip to France through Air France. Check out bargain charters to Europe at Ameropa Travel. Or take off on a moment's notice ... to Mexico, Hawaii, even Europe ... at Moment's Notice.

Spring is at large. And so is The Mall manager's murderer. Join us online for Sherlocking and shopping.

Electronically yours,

Cindy Morgan

GOINGS ON

Two free gifts ... just for your thoughts.

Both Air France and Buick Motors have free gifts waiting for you. Simply stop in at their Mall stores, complete a short, online questionnaire at each, and you'll receive a free gift as a thank-you for your thoughts. Visit Air France (GO AF) and Buick Motors (GO BU) today.

Explore Buick Motors three weekends this spring. Free.

The weekends of May 7, May 28 and June 17 are your times to roam Buick's online auto floor for as long as you'd like. For nothing. GO BU

Learn your way around with free online tours.

Three Mall merchants offer you complimentary mini-tours of their databases.

Tour AT&T.
Let AT&T take you on a guided mini-tour of its online facility. Discover the wide range of products and services and an all-new monthly contest. GO ATT

Market maneuvers.
Visit EF Hutton online and take a gratis tour of Huttonline. Discover how to turn your personal computer into a powerful investment tool. GO EF

More news is good news.
Whatever your interests, NewsNet can keep you abreast of the latest news with its custom electronic news clipping service. To take a free look at the wide range of industries and publications covered by NewsNet, GO NN.

Incentive gifts with every purchase at R+R Direct.

When you shop at R+R Direct, you'll enjoy extra discounts as a CompuServe subscriber and a free gift with every purchase.

With any order up to $125, choose either an R+R Direct pen-and-clock desk set or a distinctive perpetual calendar. For orders of more than $125, select either a free Office-on-the-Go kit or a free solar desk calculator.

Finally, with any order of more than $250, R+R will include a free powerful mini Mag Lite™ or a Silver Reed™ letter opener and desk set.

Shop R+R for all your computer supplies. And don't forget—request your free catalog while visiting. GO RD

General Nutrition Corp.'s 'thank-you' means more.

Place an order for $25 or more online at General Nutrition Center and you'll receive a "thank-you" gift. Shoppers buying more than $25, $50 and $100 in merchandise will receive healthy gifts commensurate in value to the amount spent. GO GN

Traditional clothes or a traditional rose.

Two Mall merchants invite you, CompuServe subscribers, to open charge accounts ... for use online or in-store.

Classic tailoring at Brooks Brothers.
Request a Brooks Brothers charge application online. As a preferred charge customer, you'll enjoy colorful catalogs and special sale announcements in advance of public notice. The Brooks Brothers card is welcome online and at any Brooks Brothers store nationwide. GO BR

Signs of spring—all year—from Walter Knoll Florist.
Open a Walter Knoll Florist charge account, instantly, online. Send gifts from this FTD florist year-round...and charge them to your Walter Knoll account. GO WK

Try on Apparel Concepts for a weekend—free.

Just in time for Father's Day shopping, Apparel Concepts will pick up all connect tabs the weekend of May 7. GO APC

AT&T: reaching out to the disabled.

Monthly, AT&T sponsors electronic lectures through online Forums.

On May 26 at 8 p.m., Ron Hatley, telecommunications expert for special interest groups, will offer enlightening thoughts on communicating with people who have disabilities.

Mark Mason, an international communications expert, will "speak" online June 14.

Both events are your chance to ask the experts. GO ATT

Go Mall

***Go Mall*, May/June 1988**
Volume 2 Number 3

Go Mall is published bimonthly by The Electronic Mall®, a service of the Advanced Media Group, CompuServe Incorporated. For more information, call 614/457-8600, or send an EasyPlex to 70007,1610. Editors: Cindy Morgan, Kirk Donnan and Kassie Rose.

Mall manager found murdered; reward offered.

The body of The Mall manager was discovered early Sunday morning, May 1, at The Metropolitan Museum of Art by the museum's store manager.

Stabbed repeatedly with a brass letter opener (allegedly from J.E. Smith Brassware), The Mall manager was last seen alive at 6 p.m. Saturday, April 30, by the assistant Mall manager.

Missing in action.

She was first reported missing by her husband, Lonely Larry, at 9:00 p.m. that same evening. The coroner's report estimates the time of death at between 7:30 and 8:30 p.m.

Speaking on behalf of The Mall, CompuServe Vice President John Meier said, "This is a horrendous crime. The murderer must be apprehended. Justice must be served. To this end, CompuServe is offering a $500 usage credit to the first subscriber who solves this barbaric mystery."

The inspector on the case adds, "There are a number of people we're questioning at this time, but no one suspect has emerged. We urge anyone with leads in the case to contact us through the special Murder At The Mall database we've set up.

"Working together, we can crack this case." GO MR

Win a $500 usage credit: solve The Mall manager murder mystery.

The first shopper to solve the Mall Manager's murder—tell us whodunit and why—will be compensated for superior sleuthing with a $500 CompuServe usage credit.

Get a clue.

Thirty different clues to the crime are scattered throughout The Mall. To find a clue, enter any Mall store and type the word "clue." If there's a clue in that store, it will appear automatically on your screen. If there isn't, "Sorry, no clue here" will appear and you can continue your search. Use The Mall directory as a handy guide to make sure you've visited every store.

Collect all 30 clues; then analyze them. Like a puzzle, the crime will begin to piece together.

The Inspector assigned to the case will also post weekly bulletins in a designated area of The Mall's database. You'll find some hot tips here, and possibly some red herrings as well. Also, check CompuServe's Multi-Player Games Forum now and then for additional insight.

An online detective's log.

To assist you in cracking the case, we've arranged for an Electronic Scorecard that you can print out. Keep track of the clues, and record your notes, here.

Finally, when you think you know whodunit and why, submit your solution through the official electronic entry form. Only one entry will be accepted per User ID number.

For complete rules and regulations, GO MR.

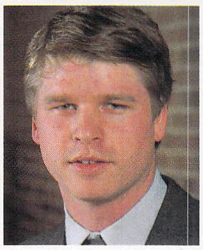
Let's be careful in there!

The Cast of Characters.

Suspects, witnesses and innocent bystanders. To peruse the motives, alibis and statements of all 30 online, GO MR.

Dweezil

- **Lonely Larry**, The Mall manager's husband
- **Nelson**, a computer nerd
- **Amorous Andy**, a love-struck electronic suitor
- **Freddy fivefingers**, a 12-year-old shoplifter
- **Dweezil**, a punk-rocker
- **The assistant Mall manager**
- **Chip and Buffy**, the last of the die-hard yuppies
- **First-Time Franny**, a new Mall shopper

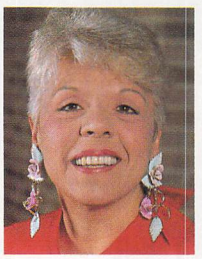


Chuck

- **Frederick**, an employee at Inside * Outside Lingerie
- **Ron**, the store manager at The Metropolitan Museum of Art
- **Charge-it Chuck**, a credit-card shark
- **Downtown Dan**, the manager of a non-electronic, downtown Mall
- **Maureen**, the store manager of J. E. Smith Brassware
- **Chuck**, an employee at Walter Knoll Florist
- **Betsy**, the Bag Lady

Val

- **Mike**, the mailman
- **The Butler**
- **Val**, a Mall valley girl
- **Susie Q. Shopper**, a Mall-a-holic
- **Bob Illuminati**, a loquacious talk show host with a large toupee
- **Linda**, the manager of Harris' Scent-Sations
- **Guido**, The Mall security manager
- **Cindy**, the manager of Marymac Industries
- **Harold**, the manager of TSR Hobby Shop



Rosemary

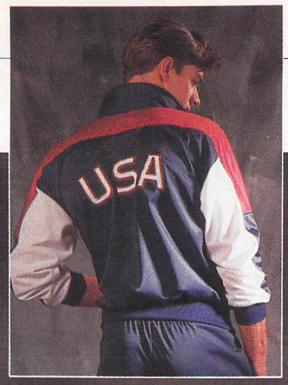
- **Mark**, the manager of Software Discounters of America
- **Fritz**, the furious husband of a compulsive Mall shopper
- **Peter**, the manager of AutoVision
- **Rosemary and Norm Belssner**, proprietors of Coffee Emporium
- **Rick**, the manager of Florida Fruit Shippers
- **June**, the store manager of R+R Direct

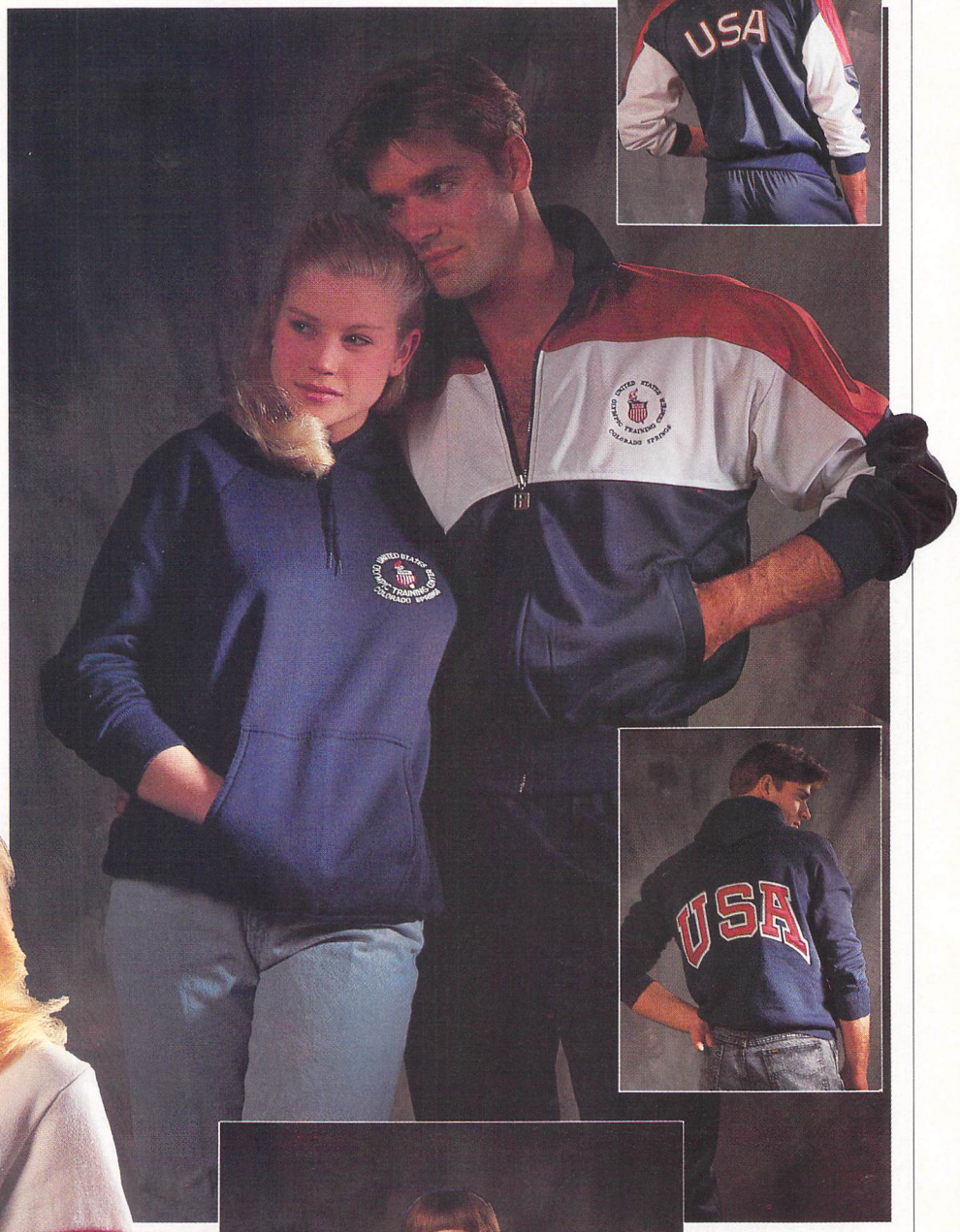
Show your support: shop online at the US Olympic Training Center gift store.

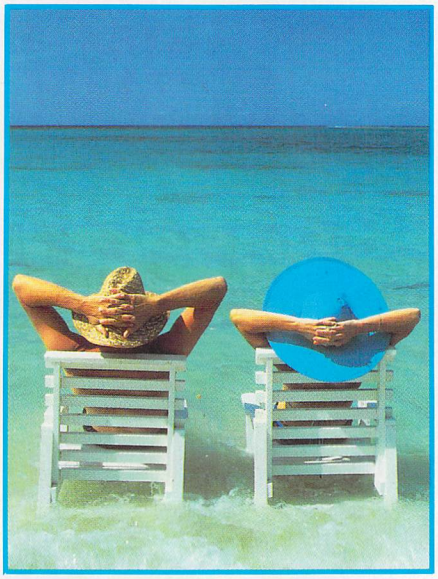
Now you can show your spirit for the US Olympic effort by shopping the United States Olympic Training Center online gift store. All proceeds from the sale of merchandise at this new Mall store will go to the US Olympic Committee, an organization dedicated to providing opportunities for American athletes of all ages and skill levels.

Wear the rings.
A variety of official US Olympic sportswear, gifts and souvenirs is showcased. Show your pride with a USA crew sweatshirt, a T-shirt of 100% cotton with the official US Olympic Training Center logo or a nylon duffle bag. Adult, youth and child sizes are available. Children's sizes—for future Olympians—feature a silk-screened Olympic logo.

Shop online. Or request a free copy of the Olympic Training Center's full-color gift catalog. Browse it at your leisure at home, then place your order electronically. To go for the gold, GO OL.







ENDLESS VACATION TRAVEL™

A new way to relax from ENDLESS VACATION TRAVEL.

Next vacation, make where you stay feel like home. Indulge in the comforts of resort condominium vacations, offering you many advantages over traditional hotel accommodations such as separate bedrooms, complete kitchens and other extras, including whirlpool tubs and microwave ovens.

Swim. Golf. Ski. Dine. Dance. Or just do nothing. ENDLESS VACATION TRAVEL offers resort condominium rentals in hundreds of premier locations throughout the continental United States, Hawaii, Mexico and the Caribbean—at affordable weekly rental rates.

Discover the benefits of this new way of vacationing. Browse online listings and pick your dream destination—a wide range of options is at your fingertips.

Let the sand and the sea bewitch you in Mazatlán, Mexico ... heat up the night with Cajun delights and jazz that dazzle in New Orleans ... catch autumn in all of her glory in the Ozarks or the Poconos.

Take advantage of ENDLESS VACATION TRAVEL's electronic Vacation Locator. Fill out the form online and let them take care of the rest.

To open the door to unbeatable vacation values, GO EV.

Computer accoutrements and candid advice now offered by Direct Micro.

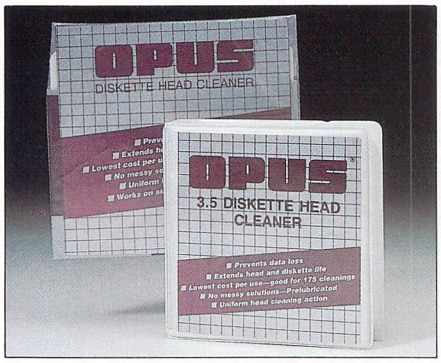
No matter what kind of computer you own, you owe it to yourself to discover Direct Micro, a new Mall merchant offering excellent values on microcomputer-related merchandise.

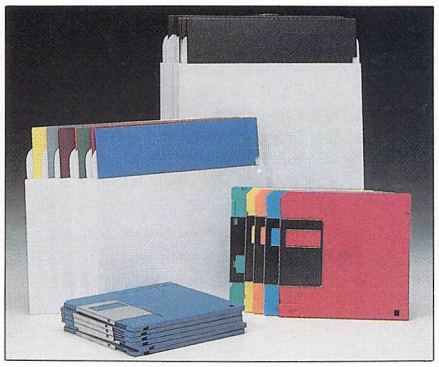
Disks, paper and ribbons.
Diskettes (3½", 5¼" and 8") ... diskette holders for home, office and the road ... paper products, including Avery brand mailing labels and perforated computer paper in pastels and brights ... printer ribbons for virtually every printer on the market ... accessories and more ... all orderable online.

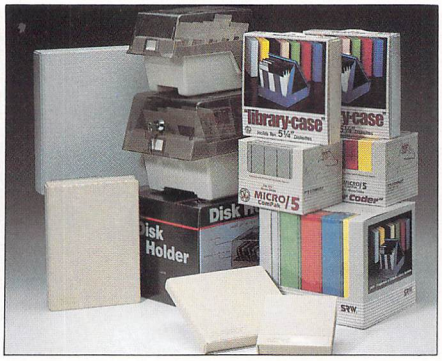
A price that can't be more right.
Every month Direct Micro features a Blockbuster Special, an incredible value you can't afford to ignore. At Direct Micro, you'll receive high quality merchandise direct from the manufacturer for a fair price. Everything sold carries a full satisfaction, money-back guarantee. All in-stock merchandise is shipped within one business day. And, for orders of $100 or more, shipping is free!

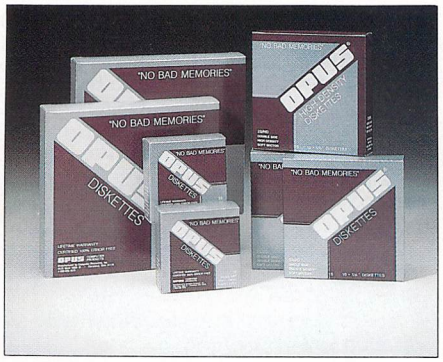
Take a hint.
To make your passage through computerland more enjoyable, Direct Micro features an online "Helpful Hints" section. Novices and old-hand hackers alike will find advice on diskette care ... technical information ... reviews of new books and products ... and more.

Go directly to Direct Micro. GO DM









Paradise Technology's goal: a computer in every pocket.

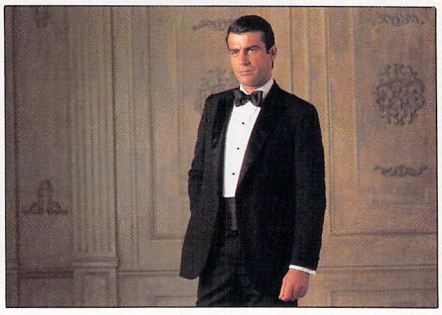
Imagine a personal computer small enough to fit in the palm of your hand, yet powerful enough to accommodate a personal database, an eight-alarm clock, a 100-year appointment calendar, a calculator and a programming language. The PSION Organizer II, powered by a nine-volt battery, is here. Featuring a menu-driven operating system and 32K memory or internal RAM, this remarkable new computer is a portable powerhouse. Best of all, at only $229.95, it's very affordable.

Optional accessories.
At Paradise Technology, shoppers can order The PSION Organizer II, as well as a wide range of optional accessories, including bar-code and magnetic card readers, a serial interface, a word processor and LOTUS-compatible spreadsheets. Soon-to-be-released plug-in modules include a modem and a tone dialer.

Programmers: join POPS.
Paradise Technology also sponsors POPS, the PSION Organizer Programmer's Society. POPS members receive a monthly newsletter and unlimited online technical support. Membership is only $35 annually and can be purchased at The Mall.

To put a personal computer in your pocket, GO PT.

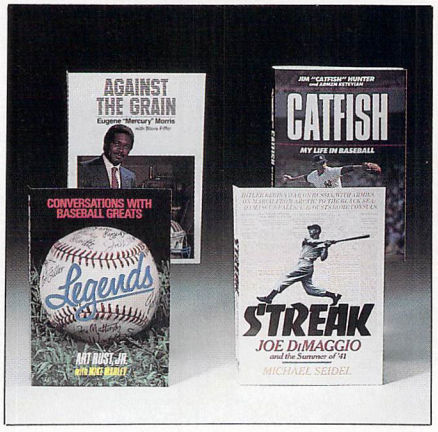
APPAREL/ACCESSORIES



Prom- or wedding-bound?
Visit Brooks Brothers for your essential formalwear. The exclusive Brooks-Blend black dinner jacket and trousers will suit you through the years.

And don't leave your pocket watch in a drawer. Brooks' black satin cummerbund has a place for it. From Brooks Brothers. GO BR

BOOKS/PERIODICALS

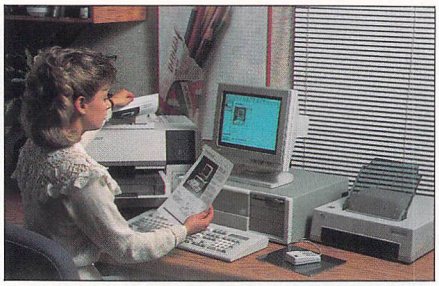


Spotlight on sports.
McGraw-Hill has a catch for you. A mound of sports books, including many new releases, such as *Catfish: My Life in Baseball* by Jim "Catfish" Hunter ... *Legends: Conversations with Baseball Greats* ... *Against the Grain* by Eugene "Mercury" Morris. From McGraw-Hill Book Co. GO MH

Announcing the Lively Arts Series.
This is an exhilarating new series of contemporary classic books devoted to show business and the arts, including *The Movies, Mr. Griffith, and Me* by Lillian Gish, with Ann Pinchot. From Mercury House. GO MER

Access public domain software.
Untapped Resources for the Business User is the ultimate reference guide to public-domain software and shareware. Learn where it is, how to get it, what to look for and why you'll benefit. From Waldenbooks. GO WB

COMPUTING



Complete desktop publishing package.
AST computer ... AST turbo scanner ... AST laser printer ... PageMaker software and Microsoft mouse. Buy the package and save $925! From R+R Direct. GO RD

8 MHZ and 640K ... to go.
Now you can take it with you. It's the Toshiba T3100 laptop. This new portable features a high resolution gas plasma display screen. Inspect its features and its low discount price. From Nitro Micro. GO NT

More portable power.
Pick from two Tandy portables: the Tandy 200 with 24K and the Tandy 1400. The first is an affordable laptop that comes with six built-in programs. The second is a new light-weight portable featuring 720K, a backlit screen and two 3.5 disk drives ... all for far less than you'd guess. From Marymac. GO MM

GIFTS/NOVELTIES

Knock twice so I'll know it's you.
With handsome brass door knockers. Select from dozens of styles, including English, Colonial, Victorian, Georgian, Federal and Betsy Ross. From J.E. Smith Brassware. GO JE

MUSIC/MOVIES

Portrait of an artist.
Art connoisseurs will delight in this video library series. Each presentation studies both the artist's life and work. Among the great masters and modern giants profiled are Georgia O'Keeffe, David Hockney, Marc Chagall, Raphael, Delacroix, Degas and Cézanne. From Arts Online. GO AO

Book a place in the sun with Bargain Holidays.

Did you hear *that*? Those rays are calling your name. Reserve the rays that are rightfully yours through Bargain Holidays of Florida. This new Mall merchant, specializing in accommodations at prices much lower than retail, makes a wide variety of hotels, motels and resort locations available to you.

Rooms with a view.
Consider, for example, Bilmar Beach Resort, a family owned-and-operated, full-service hotel located on the beach on Treasure Island. Though considered "efficiency" accommodations, they're actually anything but. Each room is equipped with air-conditioning, two double beds, carpeting, television, telephone, a full bathroom and a gulf-view balcony. Facilities offered include two swimming pools, restaurants, snack bars and miniature golf.

Intracoastal condos.
Or, opt for Aloha Bay in Indian Shores. Located on the Intracoastal Waterway just across from the Gulf of Mexico, these large one-bedroom condominiums are convenient to both the beach and shopping areas.

Bargain Holidays is also the exclusive discount operator of Days Inn in Florida. Request free information on any of the more than 90 Days Inn hotels, motels and resorts in the Sunshine State.

To reserve family fun in the sun, GO BH.

Here's grilling you'll look forward to. From Char-Broil Grill Outlet.

On a midsummer night, there's nothing quite like the flavor of a burger or steak grilled to perfection in the great outdoors.

Just in time for the backyard barbecue season, Char-Broil Grill Outlet swings its doors open online. Char-Broil offers the most innovative, most clearly differentiated line of gas grills available. Many are at incredible close-out prices.

Features that make grilling easier.
Barbecue aficianados will appreciate the extra features that are standard in this line, such as a front fire-tending door, a convenient removable ash drawer, an adjustable fire basket and handy heat indicators in the cooking hood. The results: barbecued chicken that's plump and juicy ... shish kebab that sizzles ... steaks grilled exactly to taste.

Cook out for less.
Showcased online is a wide selection of special close-out gas and electric models, all very well priced. Also available is Char-Broil's full-color catalog, featuring the entire line of products and mouth-watering recipes.

Pick up a portable for that trip to the beach or campsite. Or cook up a storm with "Hot Stuff," an innovative new product on which you can grill a burger, deep fry fish, boil shrimp or steam clams, all in one compact design!

A full line of grilling gadgetry and accessories round out the offerings. You'll discover kabob wheels, rotisserie kits, corn servers and more.

For grills to go, GO CO.

GOURMET/FLOWERS

Mix, match: a four- or eight-pack of Texas Hill country products.
Mix and match your own gift selection. Choose from a variety of Texas treats, including Texas peach butter, rhubarb-raspberry jam, jalepeno jelly, green tomato relish, artichoke pickles, Texas sweet onion relish and mesquite-smoked mustard—hot stuff! From Simon David. GO SIM

Tropical flight balloon pack.
This ⅗ bushel package contains an inflated helium balloon anchored by tropical candies. Sweet Valencia oranges round out its ballast. The balloon, which retains its buoyancy for weeks, says "Thinking of You." From Florida Fruit Shippers. GO FFS

A rose by any other name.
There's no more effective way to say it than with roses. For Mother's Day, anniversaries, birthdays or nothing special. From Walter Knoll Florist. GO WK

HOBBIES/TOYS

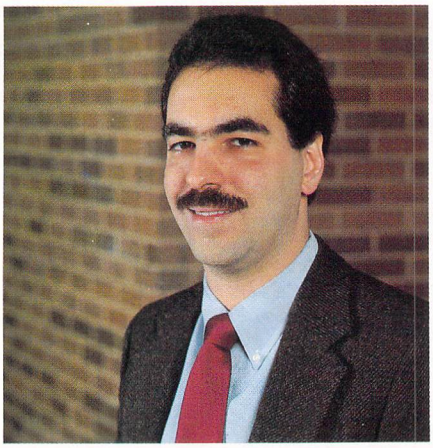
The sky's the limit.
Imagine a child's fascination at launching his or her own space exploration program. Over six feet high, with a 24" parachute and three D12-5 rocket engines, the Estes Mean Machine rocket kit is guaranteed to send any child's spirits skyrocketing. Only $20, complete! From Hobby Center Toys. GO HC

Portable pet pen.
Don't leave him home. Just pack Kennel Aire's portable exercise pen. (It's perfect for toddlers, too!) From PetWorks. GO PW

I Think You Think You Think.
An all-new family game. And you thought you knew your friends? From TSR Hobby Shop. GO TSR

Software Discounters of America: nearly 1,300 titles.

"No matter what type of computer you have, or what your interests or needs are, we've probably got the software for you," says Mark Lane, manager of Software Discounters of America's Mall store.



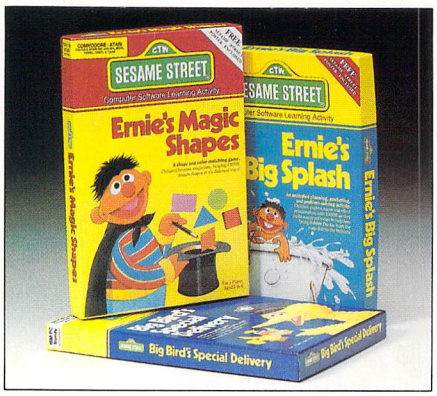
Online support via EasyPlex.

Open online now for over three years, Software Discounters has long been an innovator in electronic merchandising, offering subscribers a wide range of products at substantial savings. "It's been gratifying over the years to watch our business grow," says Lane. "Our staff enjoys 'talking' with shoppers through EasyPlex. We're always glad to let them know about new releases, or to make recommendations if they're unsure just what to buy."

Pick a brand, any brand.

Software Discounters stocks software and accessories for the Commodore, Atari 8-Bit, Atari ST, Apple II, Apple GS, Macintosh, Amiga and IBM, all at discount prices. "We're strongly committed to supporting new computers that come on the market," says Lane.

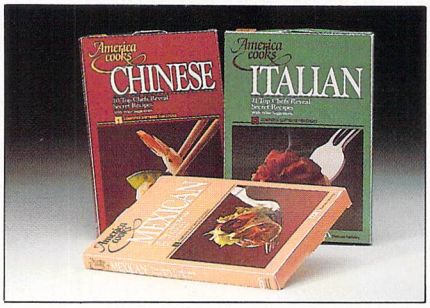
In addition to offering a wide selection of entertainment, education and productivity/utility programs, Software Discounters also features one title, at a bargain price, for each computer-type every month.



Too good to pass up.

"We've found these special sale items to be incredibly popular among our regular customers," says Lane. "Often, it's an offer too good to pass up." For example, February's sale software included *Hitchhiker's Guide to the Galaxy* for Commodore and Apple owners. Listed at $24.95, the *Guide* was available for $9.98.

A recent stroll through Software Discounter's store unearthed a wide-range of titles. For cooks, there's the



America Cooks series, including programs for Chinese, French, Italian and Mexican fares. Language buffs will find learning programs for most every language. For the pre-school set there's *Alphabet Zoo, Math Buster Plus* and *Body Transparent.* Another popular item for the younger crowd is the *Sesame Street* series.

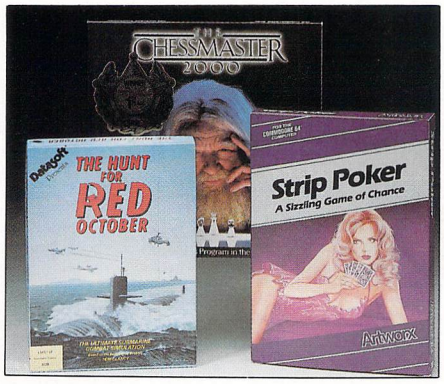
What's hot every month.

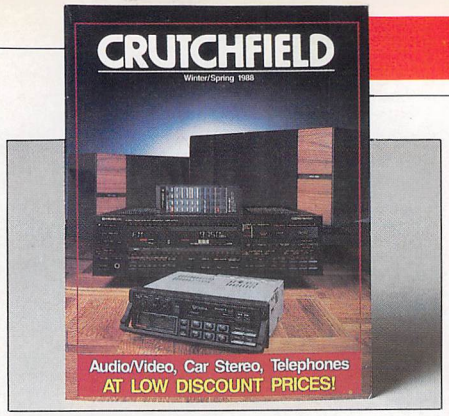
What's hot now? "One of the hottest new titles is *Hunt for Red October,*" says Lane. "*GEOS* for the Apple and the new *Where in Europe is Carmen San Diego?* are also very popular. To keep you updated on what's new and what's coming up, we've got an electronic Monthly Newsflash. It's your hotline to all sorts of incredible information."

Adult diversions.

Adult game-players will find everything from *Chessmaster 2000* to *2-on-2 Basketball* to *Strip Poker.* There's software designed to make everything from bumper stickers to postcards to T-shirts. Word processing programs, from *WordPerfect* to *Word Writer* ... spreadsheets ... financial packages, including Andrew Tobias's *Managing Your Money* for the Apple, IBM and Mac. These are just a few of more than 1,300 titles offered.

To see the software in store, GO SDA.

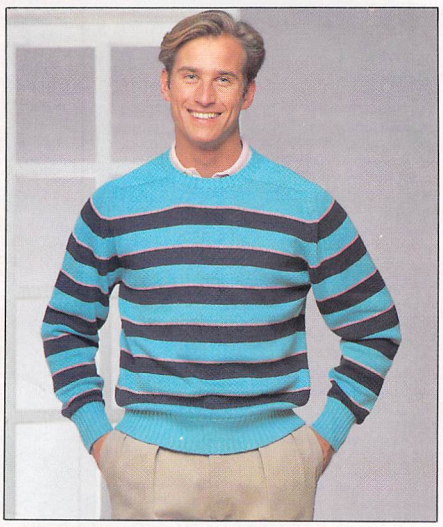




Crutchfield broadens its listening range.

Crutchfield, a leading direct-mail source of audio/video equipment, car stereos, security systems and telephones, now carries a mini-electronic catalog of highly recommended merchandise.

Scan Crutchfield's online selections, then order a complimentary print catalog. It's a bible of sorts, for anyone pondering the purchase of a car stereo, and includes: what to look for ... how to understand features ... why comparison charts are valuable ... and more. Plus information on toll-free ordering and installation service! GO CFD



Brooks Brothers for distinguished dads.

For gifts of distinction, shop at Brooks Brothers' online clothier. Classic men's wear—from oxford cloth shirts to colorful blazers to summer suitings—is showcased electronically.

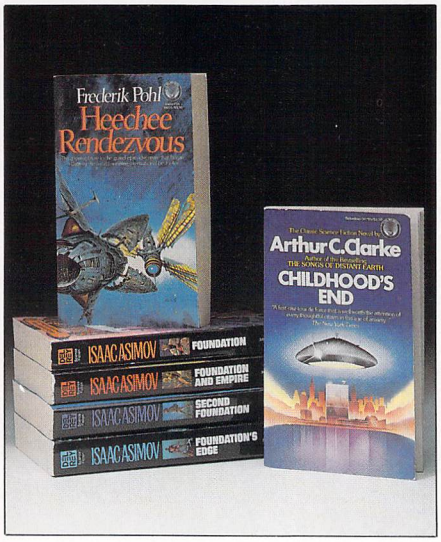
For Father's Day, consider Brooks' cotton broadcloth pajamas or Brooks' heavyweight cotton knit rugby shirt with a kangaroo pouch pocket. Or, give a Brooks' gift certificate and let dad do the deciding! Certificates can be used for online purchases, or at any Brooks Brothers store nationwide.

While visiting, request your free copy of the just-released spring catalog. Featured are classic selections in men's wear, boy's wear and ladies' apparel.

Enter a world of quality and taste. GO BR

Celestial reasonings: science fiction at Ballantine Books.

Surveyors of science fiction and fantasy, access Ballantine Books' Mall store and tune in to its online selection of Del Rey science fiction books. More than 66 titles, including new and old releases, await.



Choose a classic, such as *Childhood's End* or *Heechee Rendezvous*. Pick up a boxed set of *The Foundation Trilogy* or *The Second Chronicles of Thomas Covenant*. Re-read an old master, or discover a new favorite.

Journey to worlds far-flung and fanciful. GO BAL

Pssst ... Express Music has a distinguished secret.

Join the privileged ranks of Express Music customers—sign up for its Distinguished Customer Program. Do it online and you'll receive electronic notices of exceptional discounts and deals on a wide range of music.

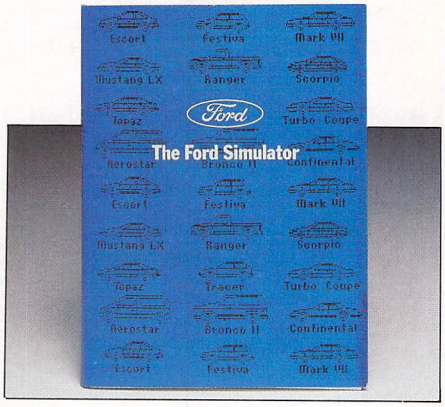
Periodically, Express Music gets an especially good price on particular items. Now, through the Distinguished Customer Program, Express Music passes these savings on to you, its preferred customers.

These private sales will *not* be advertised online or in print and will be made available *only* to distinguished customers.

A sample of past savings.

In March, for example, Distinguished Customer members could purchase The Beatles' *White Album* CD for only $20. Pick up Neil Diamond's *Hot August Night* extended-play CD for only $12.98. Or take home a set of three Roire reggae titles for only $15.00. Club members are also invited to choose a set of 10 Polygram Classic cassettes (retail $4.98 each) for only $30! These are just a few of the kinds of offers you can expect.

Get in on one of The Mall's best-kept secrets. Join today. GO EMC



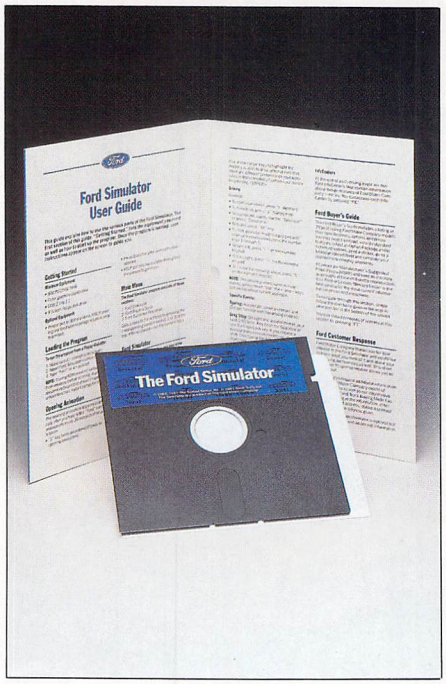
Ford Motor Co. adds a new dimension to car shopping.

Ford Motor Co. has just released a new piece of computer software called *The Ford Simulator*. With it, you can learn, in an interactive format, the latest Ford technology. You can also select a car or truck, equip it with options, get a "sticker" price and compute financing costs and monthly payments. Choose from a wide selection of the most popular Ford and Lincoln-Mercury vehicles.

Drive a Lynx, then a Lincoln.

The *Simulator* program also lets you hone driving concentration and reflex skills with four, action driving simulations—from mean Mustangs to luxurious Continentals. Manual or automatic—both are lots of fun.

Designed for the IBM personal computer or compatible with three capabilities—DOS 2.1 to 3.1, 256K and color graphics—the software is yours for only $4.95. To order, and enter a new dimension of car shopping, GO FMC.



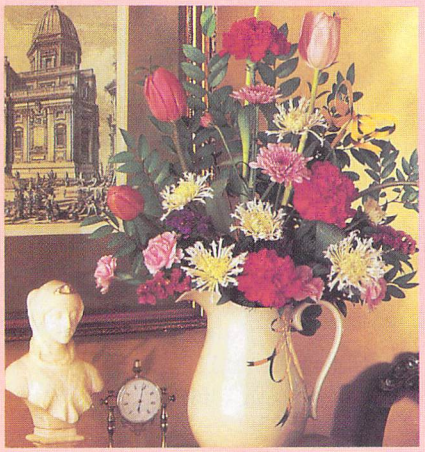
Presented here are just a few of our favorite things to give for Mother's Day (May 8), Father's Day (June19), May graduations and June weddings. These items, along with dozens of others, are showcased online in The Mall's Spring Gift Guide. To browse the guide, GO MALL.

Bring her breakfast in bed with the Breakfast Club Plus.
San Francisco-style sourdough bread mix ... a sampler of three wine jellies from San Francisco's wine country ... and, of course, Coffee Emporium's delicious Colombia Supremo coffee. From Coffee Emporium. GO COF

Returning mom's favors.

Something in the air.
Giorgio perfume from Harris' Scent-Sations. GO HR

Gourmet fast food.
Gourmet cookie collection from Pepperidge Farm. GO PF



Say it with flowers.
FTD Golden Bows Pitcher Bouquet. Bursting with spring flowers, this vase is skillfully hand-painted wih 10 kt. gold at its crown and base. From Walter Knoll Florist. GO WK

Not your ordinary nightshirt.
A 100% cotton nightshirt. Trimmed with lace and ornamented with hand-dyed and appliqued flowers. From Inside * Outside Lingerie. GO IO

Made in the shade.
Give dad his day of well-deserved rest with the original, world-famous, hand-woven Pawley's Island rope hammock. From Rin Robyn Pool & Patio. GO RR

Nautical crackers.
Gourmet goldfish from Pepperidge Farm. GO PF

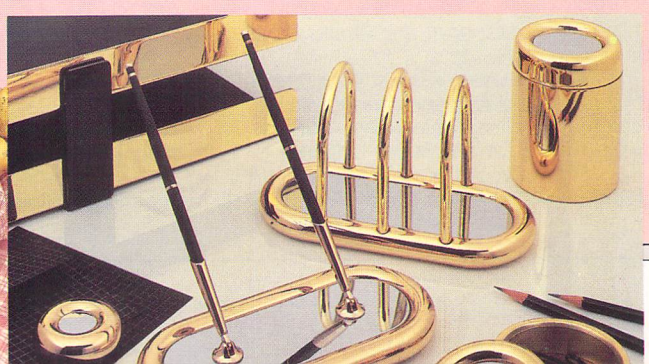
Saluting dad.

Yard games.
Croquet set for the discriminating afternoon athlete.
From Hammacher Schlemmer. GO HS

It smells like success.
Polo men's cologne from Harris' Scent-Sations. GO HR

Especially fore you.
For the golfer on the go, go direct to Hammacher Schlemmer. Select the solar-powered ventilated golf cap ... the computer-animated hand-held golf game ... *Unique Golf Resorts of the World*. Dad will tip his hat to you. From Hammacher Schlemmer. GO HS

Write on.
Complete deskware sets for home or for office from J.E. Smith Brassware. GO JE



For June just-marrieds.

Something old.
A 17th century Dutch marriage box. Allegorical figures, domestic scenes and joined hands are engraved on this six-sided box. Available in silver plate or sterling silver. From The Metropolitan Museum of Art. GO MMA

Something for the two of you.
A wicker champagne hamper full of the finest Florida fruit, jams, candies and gourmet foods. From Florida Fruit Shippers. GO FFS

For May grads.

One picture ...
Surprise the new grad with a 35mm camera. Select from Canon, Minolta, Nikon or Olympus, all at unbelievably low prices. From Garden Camera & Electronics. GO GC

... or a thousand words.
For the scribbler or the scribe, go low-tech with an estate inkwell set. From J.E. Smith Brassware. GO JE

DISCOVERIES IN PRINT

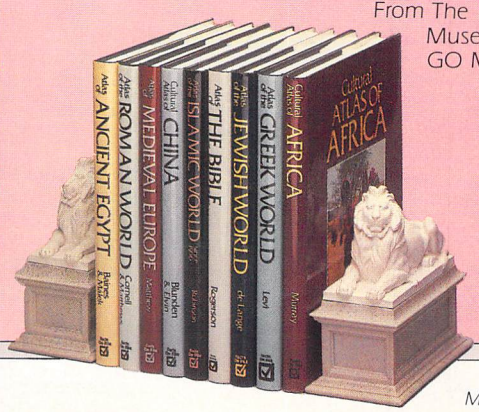
The 1988 McGraw-Hill Book Catalog.
A catalog of 136 pages brimming with bestsellers, general interest books, computer guides, business and professional books and more. It's yours, free. Browse at your leisure, then place your order electronically. From McGraw-Hill Books. GO MH

To Your Health.
A catalog of vitamins, minerals, cosmetics, natural weight-loss aids, VitaPaks and other healthy indulgences. Yours free from General Nutrition Center. GO GN

Specialty catalogs.
Three specialty catalogs ... $1 each: *Baldwin Bath Accessories, Baldwin Deskware Items* and *Giftware Catalog.* The latter features lamps, candlesticks, tableware and gift items from Lancaster, Revere and Chippendale. From J.E. Smith Brassware. GO JE

Discover other worlds at TSR.
This free, four-color, 68-page catalog is packed with family entertainment ... spies, soldiers and super heroes ... legends, lore and myth ... future science and more. From TSR Hobby Shop. GO TSR

Bookends.
The New York Public Library lions are now bookends in cast marble. From The Metropolitan Museum of Art. GO MMA



MERCHANDISE/ELECTRONICS

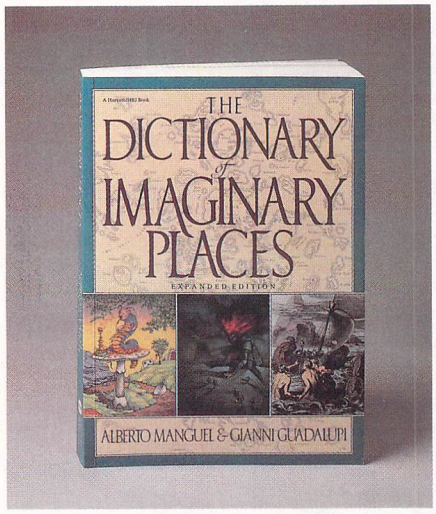
The AT&T Source Book.
A comprehensive catalog containing telecommunications systems and products, office equipment, computers and more. From AT&T. GO ATT

Talk, talk.
The new Panasonic deluxe cordless phone. From Crutchfield. GO CFD

OFFICE SUPPLIES

Return to sender.
Self-inking return address stamps. Personalized with up to five lines. From Executive Stamper. GO EX

PREMIUM MERCHANTS



The Dictionary of Imaginary Places.
Revised and expanded edition. A remarkble guide to more than 1,200 cities, islands, countries and continents that do not exist! Shangri-La ... Atlantis ... Swift's Brobdingnag ... Tolkien's Middle-earth ... and more. From The Metropolitan Museum of Art. GO MMA

FUN AND GAMES

Scrooge's Mall Scrounge.

Have we got a penny-pinching challenge for you! Scrooge's Scrounge. It's easy. Simply be one of the first 10 subscribers to find three items on The Mall selling for 99 cents or less, and you win a $12.50 usage credit. (Sorry, free catalogs and premiums don't count.) To qualify, complete the online entry form with each item's name, price and merchant. Entries will be accepted beginning at 12:01 a.m., May 1. Complete rules and regulations can be found in Go Mall Online.

Let the game begin! GO GMO and select "Fun & Games."

AT&T's monthly 'chain gang.'

Test your knowledge of system integration with the AT&T Chain Contest. In each new monthly contest, follow the "links" online. They'll lead you to a solution. A $25 AT&T gift certificate will be awarded to the first person who answers correctly ... but all who complete the contest correctly will receive a prize! You literally can't lose. For details, GO ATT.

Take the stage via Tele-Charge.

Put your stage sensibilities to the test with Tele-Charge's monthly Theatre Buff Brain Buster quiz.

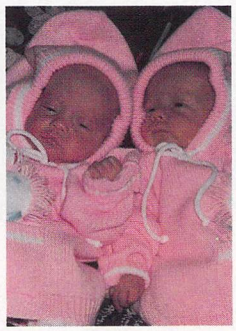
Every month, a new three-question quiz is posted. And every month, the first five subscribers with the correct answers win a prize. Confident? Here's one of the three questions for May:

In her Broadway debut, Mary Martin played a naive but accommodating young lady who somehow was stranded in Siberia and somehow felt the urge to shed her clothing. Name the musical and the song she introduced.

Think you know? On your mark. Get set. GO TC

THE WINNER'S CIRCLE

Twin Bills.



Congratulations to Leonora and James Bills on the birth of their first children, twins, and on winning The Mall's First Annual First Baby Contest. Arriving two months early, Katherine Erin and Jessica Karen Bills made their debuts at 5:14 p.m. and 5:15 p.m., respectively, on January 1st, 1988, in Macon, Georgia. Katherine weighed in at 3 lbs. 10 oz. and Jessica at 3 lbs. 9 oz.

As the first future CompuServe subscribers to arrive in 1988, the baby Bills win a basket of prizes donated by Mall merchants.

"Their mother and I will rely on (Coffee Emporium's) gourmet coffees during those midnight feedings," says James. "And the cookies from Pepperidge Farm are just the best...I want to assure you—when we're not taking care of the babies, Jean and I spend every free moment doing aerobics with Jane Fonda. Babies are doing just fine, thank you!"

Welcome to the world, runners-up.
And a warm welcome to these new future CompuServe subscribers. As runners-up in The Mall's First Baby Contest, each baby's parents have been issued a $12.50 usage credit on CompuServe:

Christopher Erik Foraker
Born January 2, 9:54 a.m.
Doyelstown, Ohio

Amanda Marie Hill
Born January 2, 1:26 p.m.
The Woodland, Texas

Lisa Mary Casolari
Born January 3, 7:15 a.m.
Addison, Illinios

Garner Frederick Kropp
Born January 4, 1:24 a.m.
Burbank, California

Winner's perfect cup of coffee is a Foglifter.

Congratulations to Rod Graybeal of Seattle, Wash., winner of Coffee Emporium's Perfect Cup of Coffee Contest. The challenge asked subscribers to describe their most perfect cup of coffee in 25 words or less. Rod wins a full pound of Jamaican Blue Mountain Coffee, arguably the best in the world, for his coffee comments.

Here's Rod's winning entry: *In considering the Perfect Cup of Coffee, I would describe it this way: 'I don't need a quiet moment. I don't need soft music. Anytime, anyplace, a cup of Foglifter is perfect enjoyment.'*

Discover why Rod considers Foglifter so unique. (In honor of Rod, it's now on sale!) GO COF

MALL DIRECTORY

APPAREL/ACCESSORIES

APC Apparel Concepts for Men ■
GD The Gold Connection
BR Brooks Brothers ■ *
EE Elite Eyewear *●
IO Inside * Outside Lingerie *

AUTO

AQ Autoquot-R
AV AutoVision
BU Buick Magazine ■
DU ABC Compu-Lease
FMC Ford Motor Co. ■

BOOKS/PERIODICALS

BAL Ballantine Books
DJ Dow Jones & Co.
MH The McGraw-Hill Book Co. ■ *
MER Mercury House
BK Small Computer Book Club
TL Time-Life Books
WB Waldenbooks

COMPUTING

AN Antic Online †
PRT Butler Graphics
CDA CDA Computer Sales ■ *
CD Computer Discount Warehouse
CE Computer Express *●
DM Direct Micro † ■ *
HTH The Heath Co. ■
IS Investment Software ■
MM Marymac Industries Inc.
NT Nitro Micro ■
PT Paradise Technology †
RD R+R Direct ■ *
SAF Safeware Computer Insurance ■
SDA Software Discounters of America
VC Virtusonics

FINANCIAL

INC Business Incorporating Guide
HRB H&R Block
MU Max Ule Discount Brokerage

GIFTS/NOVELTIES

BG BannerGram by Mail
HI Hawaiian Isle
IV Ivory Cache *
JE J.E. Smith Brassware
SP Some Things Special

GOURMET/FLOWERS

COF Coffee Emporium ■
FFS Florida Fruit Shippers ■
PF Pepperidge Farm ■ *
SIM Simon David
WK Walter Knoll Florist ●

HEALTH/BEAUTY

GN General Nutrition Corporation ■ *
HR Harris' Scent-Sations

HOBBIES/TOYS

DD Don's Dollhouse & Miniatures *●
HC Hobby Center Toys
DO The Doll Place
TSR TSR Hobby Shop ■ *

MERCHANDISE/ELECTRONICS

ATT AT&T ■
ORD CompuServe Store
CFD Crutchfield ■ *
GC Garden Camera & Electronics *
SV Stereo/Video Factory

MUSIC/MOVIES

AO Arts Online ■ † *
RCA RCA Music Service
EMC Express Music *
MV Magic Castle Video
MAO Music Alley Online

OFFICE SUPPLIES

EX Executive Stamper
SC Stationery Center ● *

ONLINE SERVICES

EF EF Hutton ■
NN NewsNet
OA Official Airline Guides, Inc. ■

PREMIUM MERCHANTS

HS Hammacher Schlemmer ■ *
MMA Metropolitan Museum of Art *
MC Morrell and Company ■

SPORTS/LEISURE

CO Char-Broil Grill Outlet †
RR Rin Robyn Pool 'N Patio ■
OL Olympic Gift Store ■ † *
PW Petworks

TRAVEL/ENTERTAINMENT

AF Air France ■
AT Ameropa Travel ■
BH Bargain Holidays †
EV ENDLESS VACATION TRAVEL * †
MT Moment's Notice ■
TC Tele-Charge—Theatre tickets

■ Offers free print catalog.
* Denotes electronic order form for use with print catalog.
● Credits cost of print catalog toward purchase.
† Denotes new merchant.

HOW TO ORDER

Shopping The Mall.

Ordering from The Electronic Mall is easy. Each time you enter a Mall store, a personal order file, much like an electronic shopping cart, is opened for you. Browse a store's database, and when you see a product you would like to buy, type the letter "O" and the order will be placed in your file, similar to selecting an item from a store's shelf and placing it in your cart.

You can order directly from the product description page — there is no need to return to a store's top menu. You can order one item or a dozen. When you type "O," the system does not complete your order; it only registers your desire to make a purchase.

Checking out.

To complete your order, you must "check out." You can do this by typing CHECKOUT, the GO command of the next store you wish to visit or any command that takes you elsewhere on CompuServe. This tells the system you are ready to complete the order and presents two options.

1. Cancel your order by typing EXIT.

2. Complete your order by responding to a series of prompts for additional information.

When you have supplied the necessary information, you will receive an order summary. You now have the chance to change part or all of your order. For example, if you've ordered three books but decide you only want two of them, you can delete one book from your order. Or maybe you would like to have your order shipped to your office instead of your home. You can make that change, too.

Once you've made any changes, you again will have the chance to review your order. When you confirm the order as correct, you will receive an order confirmation number. *At this point, your order is complete.* It is sent electronically to the Mall merchant's CompuServe mailbox for processing. The order process is the same for every Mall merchant, but methods of payment and delivery may differ. If you have questions regarding your order, it is best to contact the merchant directly by using the customer service information provided within each store.

HOW TO OPEN A MALL STORE

Do you have a product or a service of interest to CompuServe subscribers? Consider opening a Mall store. Contact the sales office for details.

Call 614/457-8600. Send an EasyPlex to 70007,1476. Or write:

The Electronic Mall®
5000 Arlington Centre Blvd.
Columbus, OH 43220
614/457-8600

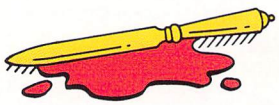
GOINGS ON—AT A GLANCE

MAY

1	**2**	3	4	5	6	**7**
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	**26**	27	**28**
29	30	31				

JUNE

			1	2	3	4
5	6	7	8	9	10	11
12	13	**14**	15	16	17	**18**
19	20	21	22	23	24	25
26	27	28	29	30		



May 1
- Murder on The Mall! Mall manager found stabbed.GO MR
- Scrooge's Mall Scrounge begins.
- New AT&T Chain-Link Contest. GO ATT
- New Tele-Charge Theatre Buff Brain Buster Quiz. GO TC

May 7
- Free connect day at Buick Motors. GO BU*
- Free connect day at Apparel Concepts for Men. GO APC*
- Free connect day at Coffee Emporium. GO COF*

May 8
- Happy Mother's Day!
- Free connect day at Buick Motors. GO BU
- Free connect day at Apparel Concepts for Men. GO APC*
- Free connect day at Coffee Emporium. GO COF*

May 26
- AT&T hosts electronic lecture. Subject: communicating with the disabled. GO ATT

May 28
- Free connect day at Buick Motors. GO BU*

May 29
- Free connect day at Buick Motors. GO BU*

June 1
- New AT&T Chain Link Contest. GO ATT
- New Tele-Charge Theatre Buff Brain Buster Quiz. GO TC

June 14
- AT&T hosts electronic lecture. Subject: international communications. GO ATT

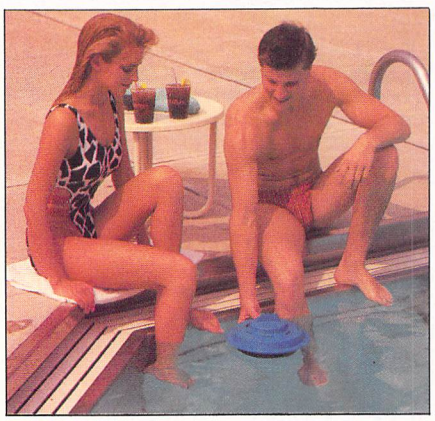
June 18
- Free connect day at Buick Motors. GO BU*

June 19
- Happy Father's Day!
- Free connect day at Buick Motors. GO BU*

* Please remember that for Mall promotions that include free connect time, all applicable communications surcharges remain in effect. Free connect is always from midnight to midnight.

WINDOWS ON THE MALL

SPORTS/LEISURE



Pool owners: no more chlorine.
Now you can replace chlorine with Baquacil™, a hi-tech chemical disinfection program for swimming pools that does not use chlorine. Fully approved by the EPA since 1981. Get into the swim of things. From Rin Robyn Pool & Patio. GO RR

TRAVEL/ENTERTAINMENT

Drop everything.
We're on vacation. A sojourn in the sun is at your fingertips, for far less than you'd imagine, through Moment's Notice's Last Minute Travel Club. A one-time membership fee entitles you, your family and friends to a full year of money-saving travel opportunities. Join online. Then get away from it all, again and again and again. From Moment's Notice. GO MT

ELECTRONIC LETTERBOX

Sunshine that spreads.
To everyone at Florida Fruit Shippers: We've never been as pleased with citrus fruit via mail order as we have with yours. Not only has the service been fabulous, but the fruit (especially the oranges) are by far the best we've had. Consider us committed FFS customers—we're spreading the word about the quality of your citrus. Keep up the good work.

The Chiasson Family
Worcester, Mass.

Necessary replacements.
Dear Mall Manager,

Last month, my computer system was stolen during a burglary. Trying to purchase new equipment was quite an adventure. I've had Tandy equipment for the past several years and replaced it with upgrades.

I had written Marymac Industries' phone number down from an earlier CompuServe session and used it to replace my computer. I received next-day service at a price I doubt seriously could have been beaten anywhere in the country.

Just a note to let you know how satisfied I was with Marymac's service.

R.M. Lehner
Tuscon, Ariz.

Updated Versions Ready for Uploading

The data libraries in CompuServe's forums are filled with thousands of programs and textfiles. The following are a few of the files uploaded to the data libraries in recent months. For a more up-to-date list of uploads, check the "Uploads" columns in *Online Today Daily Edition* by typing GO OLT-3700 at any CompuServe Information Service prompt. New columns are added twice monthly.

AI EXPERT FORUM
(GO AIE-100)

Xlisp version—Xenix 286/386 version of Xlisp 2.0. Ported from MS-DOS sources. Executable file only. File XXLISP.Z in Data Library 2.

AMIGA FORUM
(GO AMIGAFORUM)

Communications program—CoComm, Ben Blish's communication program for the Amiga. File COCOMM.ARC in Data Library 4. See also SHORTD.ARC in the same data library for documentation.

Disk backup—A hard-disk backup utility for the Amiga. File BACKER.ARC in Data Library 9.

ATARI 16-BIT FORUM
(GO ATARI16)

Frequency selector—A program to predict the best radio frequency for ham radio and SWL operators to communicate between two given points. Courtesy of Personal Database Applications. File MMUF.ARC in Data Library 2.

BROADCAST PROFESSIONALS FORUM
(GO BPFORUM)

Magazine index—The only electronic edition of the *Broadcast Engineer* master article index for 1987. Uploaded by permission of Intertec Publishing. File BEIND.ARC in Data Library 14.

COMMODORE MUSIC, GRAPHICS AND GAMES FORUM
(GO CBMART)

Strategy game—A GEOS strategy game for one player with a number of levels of play. File CIRCE1.IMG in Data Library 13.

Software inventory—A program for the Commodore 64 to help you keep an organized inventory of software. File SOFTIN.IMG in Data Library 1.

EDUCATION FORUM
(GO EDFORUM)

AIDS info—A document prepared under the auspices of the Sex Information Education Council of the United States to help you talk to children about AIDS. File AIDS.TXT in Data Library 15.

IBM COMMUNICATIONS FORUM
(GO IBMCOM)

AUTOSIG—A new version (5.60) of AUTOSIG, the original automated forum-accessing program that is supported in its own section on this forum. File ATO560.ARC in Data Library 1. See also ATODOC.ARC, ATOADV.ARC and ATO560.REQ in the same data library.

Quick B driver—TCQB, an external CISB driver that supports the new Quick B protocol. Handles baud rates up to 57,600. Does CTS checking for flow control modems work and both uploading and downloading. File TCQB.ARC in Data Library 2.

IBM NEW USERS FORUM
(GO IBMNEW)

Pattern sketcher—A program to draw patterns on an IBM PC or compatible color monitor. You control the patterns and change the colors. Screens can be saved, recalled or plotted. Music optional. File MS.ARC in Data Library 5.

File packer—ARCA performs the Add function of the ARC utilities to create a new archive or to add files to an existing archive. New version improves selection of the compression method. File ARCA.ARC in Data Library 2.

Baseball stats—Version 3.0 of Baseball Statkeeper. Database size to 220 players on 12 teams. Adds defensive stats and sorts on all stats. File BASBE3.ARC in Data Library 6.

INVESTORS' FORUM
(GO INVFORUM)

Real estate helper—Turbocal, a program for IBM PCs and compatibles that computes commission, interest and closing costs. It estimates cost and tax benefits, buyer qualification and more. File REALTR.ARC in Data Library 6.

Ethical investing—A shareware database of files on socially responsible investing. Includes data on mutual funds, companies to avoid in South Africa, nuclear utilities and defense contractors. File ETHINV.ARC in Data Library 1.

MAUG APPLE II/III FORUM
(GO APPTWO)

Life estimator—A program for the Apple to help predict your lifespan. File LIFETM.BNY in Data Library 1.

Terminal emulator—A VT-100 terminal emulator program for the Apple IIgs. File GSVT.BNY in Data Library 10.

Text game—Rule China in this text game for the Apple. File DYNASTY.BQY in Data Library 12.

MAUG HYPERFORUM
(GO APPHYPER)

Horse race—A horse race-type game intended for children. Includes HyperTalk routines. File RACES.SIT in Data Library 2.

BBS—HyperBBS, a bulletin board system written in HyperCard that is easy to set up, run and modify. File HYPERB.PIT in Data Library 8.

MAUG MAC PRO FORUM
(GO MACPRO)

Checkbook program—CK, a checkbook and home-finance program for the Macintosh. File CK.SIT in Data Library 4. See also ABOUTC.TXT in the same data library to learn about the program.

Download help—A desk accessory that permits downloads using CompuServe's Quick B protocol. File QUICKB.BIN in Data Library 8. See also QUICKB.TXT in the same data library for a textfile describing this desk accessory.

MODEL 100 FORUM
(GO M100SIG)

Towers of Hanoi—The *Towers of Hanoi* game developed on the M100/DVI. File TOWERS.DVI in Data Library 5.

SCIENCE FICTION AND FANTASY FORUM
(GO SCIFI)

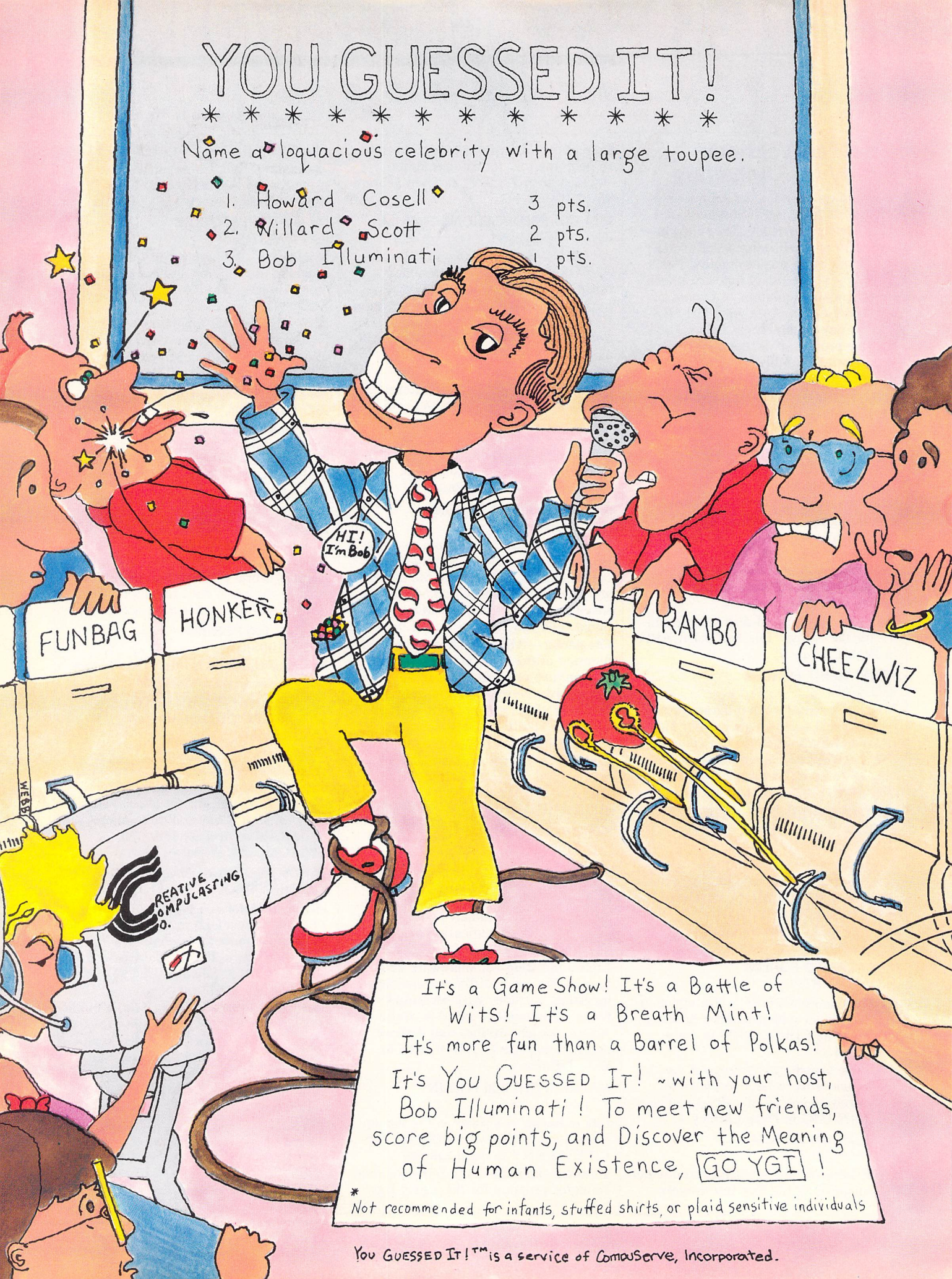
Trekkie's delight—A three-dimensional, real-time "Star Trek" combat simulation game written for the Z-100 with at least 192K of RAM and three planes or color RAM of at least 32K. File STARCM.ARC in Data Library 2.

TANDY PROFESSIONAL FORUM
(GO TRS80PRO)

Flight simulator—A program for the TRS-80 Models I/III in which you fly a tri-engine commercial jetliner on an eight-stop route. File FLTSM.BAS in Data Library 2. See also FLTSM.DOC in the same data library.

Multiple file printer—Print File, a public-domain multiple-file print utility for the Model 4. Prints a file with page headers, page number and filename. File PF.CMD in Data Library 3. For instructions, see PF.DOC in the same data library.

David Peyton co-authored How to Get the Most Out of CompuServe *and* CompuServe for IBM PC Power Users. *His CompuServe User ID number is 76703,244.*


YOU GUESSED IT!
* * * * * * * * * * * * * *
Name a loquacious celebrity with a large toupee.
1. Howard Cosell 3 pts.
2. Willard Scott 2 pts.
3. Bob Illuminati 1 pts.
HI! I'm Bob
FUNBAG
HONKER
RAMBO
CHEEZWIZ
CREATIVE COMPUCASTING CO.
WEBB
It's a Game Show! It's a Battle of Wits! It's a Breath Mint! It's more fun than a Barrel of Polkas! It's You Guessed It! ~with your host, Bob Illuminati! To meet new friends, score big points, and Discover the Meaning of Human Existence, GO YGI !
*Not recommended for infants, stuffed shirts, or plaid sensitive individuals
You Guessed It!™ is a service of ComuServe, Incorporated.

CBers Celebrate with Parties, Profiles

CBers have taken party festivities into their own hands. This year, instead of the annual Columbus bash, regional parties will be held. What better way for CBers to exchange hugs and conversation with online friends?

"It makes more sense to support regional parties so more people can attend," says Pat Phelps, CompuServe product manager. In April, CBers attended a party in Las Vegas that was hosted by Phooey Feeny, Mysty and Lady Luck.

The big difference between the regional parties and past Columbus parties is that the CBers are in charge of the planning. "If the regions want our support and their plans appear to draw a large number of CBers, we would be happy to help," says Phelps. "Washington, D.C., Los Angeles and New York would be ideal locations for regional parties."

In addition to the change in parties, CBers will notice a new capability within the CB Simulator itself: Profiles. This command enables any CBer to get general information on other users who have submitted profiles. This enhancement, suggested by CBers themselves, is easy to use. All a subscriber needs to know is the handle, User ID or job number of a particular individual.

Each profile contains a brief paragraph about the CBer's occupation, hobbies, age and other interesting facts. A special feature of Profiles is that it automatically keeps the CBer's age current.

Interested participants need only submit general background information about themselves to CompuServe. The material is reviewed to assure that it meets CompuServe standards. Once approved, the profiles are put online.

All profiles are filed in an in-house storage unit. This online library provides quick access to a user's background and thus gives CBers the opportunity to "meet" the person behind the handle. "If a handle catches your eye, the command /Profile will provide information on that person," Phelps says.

The CB Club offers two pricing plans for those who use CB frequently. For a $25 per month fee, you can use CB for $4/hour, even at 1200 baud. For a $100 per month fee, you can use CB for $1/hour. (Communications surcharges do apply.) CB Club members get a reserved handle on CB, as well as a quarterly CB Club newsletter.

New Fantasy Leagues Generate Excitement with Sports Fans

by Carole Houze Gerber

If talk of RBIs, stolen bases and earned run averages makes you long to grab a bat or coach a team, it's time to sign on for an exciting season of fantasy baseball in the Sports Forum.

"It's not baseball as you've ever known it," explains Harry Conover, the new Sports Forum administrator. "In a nutshell, it's the selection and maintenance of a roster of 23 real baseball players. The object of the game is to accumulate the most total points spread over eight statistical categories, such as earned run averages. The real-time aspect comes into play because you use statistics generated during the players' actual performances while the season is in progress."

Conover adds that each online player has an active roster and a reserve list with an opportunity for movement between the two, once a week, at "clearing time," which occurs on Sundays for American League teams and Mondays for National League teams. American League President Joe Feinstein and National League President Steven Rubio collate and update player movements and statistics before turning the information over to Walt Kirspel, the official scorer, who publishes the comprehensive statistical data each week.

"We have 12 leagues now, and it wouldn't be unheard of to have 20 or more during the season," Conover says. "To do that, we'd have drafts to form new teams in new leagues and auctions with people bidding on players with fake units of money.

"At the end of the season, prizes of athletic merchandise and computer software will be awarded to the teams with the highest point totals across all the leagues. There will also be a 'Champion of Champions' prize for the person who garners the most points on a weighted average across all leagues. This prize is a secret, but it will be a dandy."

Conover adds that even though the season has begun, it is not too late to sign up for a team.

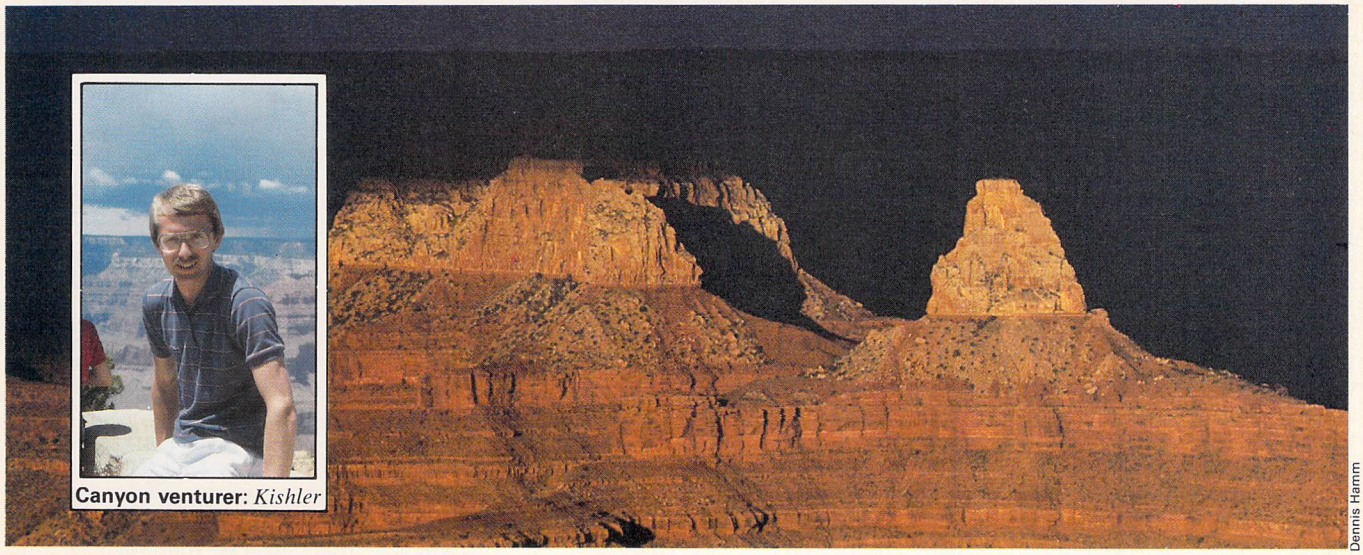
In addition to fulfilling their fantasies of playing baseball, Sports Forum members can have regular online chats with baseball owners, managers and players from major teams. An early guest, Dave Perkins, baseball reporter who covers the Blue Jays for the *Toronto Star,* kicked off the season. Regular conferences on other sports, including football, hockey and basketball, are also planned for each season.

"These are the big four," Conover explains. "But we will also feature guest experts on college sports. Lately we've had interest from horse-racing fans, so we're taking steps to have a celebrity conference with one of the top thoroughbred trainers in the country near Kentucky Derby time. We want the forum to be responsive to our members."

Conover's unusual background—which includes broadcasting, writing, sports and computers—makes him exceptionally well-suited to being this forum's administrator. He's been a producer of the Long John Knebel and Candy Jones radio talk show in New York City, the country's highest rated radio talk program in the mid-1970s. Presently, he is president and CEO of Computer Simulated Sports Inc., a Boston-based software database company that creates player performance profiles used in contract negotiations. A certified Apple developer and Macintosh consultant, he also writes about sports simulation software for *MacUser* magazine.

Despite these credentials, one of his most memorable career moves dates back to the spring of 1968 when he and another rookie named Reggie Jackson signed on with the Kansas City Athletics. Jackson's record, as everyone knows, is long and legendary. Conover's is short and rueful. A pitcher, Conover retired after injuring his arm in spring training when he gave up a home run to Willie Mays. "The ball is probably still in flight somewhere in the universe," Conover quips.

To access the Sports Forum, type GO SPORTS at any prompt. Conover urges you to drop by. "We have a wonderful feeling of camaraderie here, and a great deal of spontaneity and humor," he says. "The language spoken here is a universal one—sports."



Canyon venturer: *Kishler*

Dennis Hamm

Hiking in the Grand Canyon

Rock Formations and Beautiful Sunsets Attract Vacationers

by Dave Kishler

Despite hot temperatures and lodging reservations that are hard to come by, visiting the Grand Canyon National Park in the summertime is an unbeatable adventure in beauty. From the rising and setting of the sun amongst the canyon plateaus to waking to the sight of deer herds to hiking into the depths of the earth, a visit to the Grand Canyon can be a relaxing yet exciting experience.

Our trip to the Grand Canyon began in sunny, hot Phoenix where my wife, Lynne, attended a conference. The afternoon temperature was 112 degrees—so hot you could burn your hand opening the car door (or climbing up the swimming pool ladder!). Most of the area residents wisely avoided the afternoon sun, leaving us tourists to scurry from one air-conditioned building to another.

We left Phoenix mid-morning and drove through the sparse desert terrain towards Sedona, a small town midway between Phoenix and the Grand Canyon known for its legendary red rock formations. There are several hotels in Sedona, some offering balcony views of a picturesque mountain ravine that runs the length of the town and beyond. Sedona has numerous craft stores that offer authentic Indian items as well as lesser-quality knickknacks.

The next morning, we headed north toward Flagstaff, marveling at how the green pine forest landscape was in such sharp contrast to the desert cactus environment just a few hours south. In the distance, we saw the snow-capped San Francisco Peaks, emerging from a seemingly flat landscape.

We arrived at the Grand Canyon National Park in late afternoon. Area accommodations are either inside or outside the park, the latter being in a small roadside town a few miles from the park entrance. Despite calling several weeks in advance for room reservations inside the park, we were unable to secure a room for the first night of our visit. So we spent our first night at one of the chain motels outside the park, paying a premium price for ordinary accommodations.

The next morning, we drove the few miles to the park entrance. We were not, as we had been warned, run down by a caravan of motor homes. In fact, most visitors were quite polite and seemed as caught up as we were in the beauty of the surroundings.

We pulled off at Mather Point, the first observation area after entering the park. We still had not seen the Canyon itself. But as we approached the parking area, there it was in front of us—stretching hundreds of miles to the west, as far as the eye could see. Even the most-seasoned traveler could not help but be awestruck at the first sight of the Canyon.

We drove to the main park area—Grand Canyon Village—and checked into Maswik Lodge, one of the six "inside-the-park" lodges operated on a contract basis by the Fred Harvey company, which also maintains the park's restaurants and snack bars. We heard that the park's lodges varied considerably in quality, but our corner room was clean, modern and spacious and had a deck from which we watched several small herds of deer pass by each evening.

We limited our activities to the Canyon's South Rim where most nature trails begin. The North Rim—214 driving miles away—is at a higher elevation and offers different vegetation and animal life.

The Visitors Center, with a knowledgeable and friendly staff, had information about a range of activities for the hardiest mountaineer to the least-adventurous tenderfoot. Lynne and I were somewhere in between. We found the early morning escorted nature walk helpful to familiarize us with the overall layout of the South Rim area and the starting points of the various trails that descend to the Canyon floor. It also gave us an appreciation for the history of the Canyon's development.

We chose to hike the Bright Angel Trail early one morning. It is one of the easier, more heavily used trails, but still offers a good perspective on the depth of the Canyon and its many layers of rock formed over millions of years.

Trails are rated by level of difficulty, and some are closed during certain times of the year. The rule of thumb is to allow twice as much time for your return trip as for your descent and to take plenty of water (at least one quart per person for a short hike). We left for our hike at 7 a.m. and arrived back at 9 a.m., tired and warm. The cool morning air warms very quickly, giving way

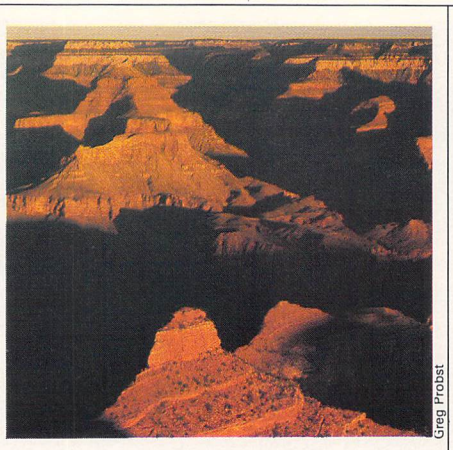
Greg Probst

to the beating sun.

More experienced hikers may wish to take an overnight trip to the Canyon floor. There are several permanent camps there. If you make reservations several weeks in advance, you can take a mule train trip down into the Canyon. One tour guide called the mules the park's "hardest working employees."

We grudgingly set our alarm clock for early one morning so we could see a Grand Canyon sunrise—and it was well worth the effort. The whole face of the Canyon changed minute-by-minute as the sun's light created various patterns of shadow and color. We also watched several sunsets. They, too, were pretty, though not quite as spectacular as sunrise. We were amused by the friendly jockeying for position by the many photo buffs, each trying to get the "best" shot of the sun as it slipped below the Canyon plateau.

One of our most memorable experiences was watching a thunderstorm move across the Canyon, miles away from us. The lightning was spectacular, and we could barely hear the thunder as it reached our ears a full 20 seconds after the lightning flashed.



Greg Probst

We had no trouble getting around inside the park with our rental car, on foot or on the park's shuttle buses. The South Rim trail, which followed the edge of the Canyon, was beautiful. We could choose to walk or ride the shuttle bus, which stopped at the various lookout points, each offering a slightly different view of the Canyon.

The food at the lodge's several cafeteria-style restaurants was adequate and reasonably priced. The food at the sit-down restaurant in the Bright Angel Lodge was much better, though more expensive. The Bright Angel Lodge also had a snack bar and ice cream shop that we visited several times.

There are lots of activities available—rough and smooth water rafting, helicopter and fixed-wing plane rides, bus tours and more. Some of these can be expensive, especially for large families, so it's best to check prices carefully. Some activities also require reservations—ranging from a few hours to a few months in advance.

To get the most out of a visit to the Grand Canyon area, plan far in advance, send for written information and make your reservations for the park lodges well ahead of your visit.

For assistance and a wealth of detailed information on travel in the Grand Canyon and other western destinations, type GO WESTCOAST at any prompt on the CompuServe Information Service.

Dave Kishler is supervisor of corporate communications for CompuServe.

Making Friends at Your Destinations

by Cathryn Conroy

Masa Hayashi had long dreamed of visiting the United States. A native of Tokyo, Masa wanted to see it all—from the Grand Canyon to Walt Disney World to Capitol Hill. Last fall, Masa got his wish: a grand tour planned with the help of his friends in CompuServe's Travel Forum.

Although he had an itinerary that directed his travels from city to city and state to state, Masa relied on forum members to help him pick the best restaurants, hotels and tourist sights.

Accessing CompuServe with his laptop computer in hotel rooms, he would post questions. "I got interesting information from the forum members. As natives of the city, they have information not described in guidebooks." Although he was traveling alone, Masa said he never felt lonely because of his online friends.

Any traveler can do what Masa did by using the experts—those who live and work in the destination city—to help plan a vacation. The Florida Forum and the Travel Forum are designed to help you do just this.

Both forums' message boards offer online information that amounts to mini-travelogues on select tourist sights. In addition to using the boards as a place to ask questions about a specific city or vacation spot (Where can I take my family, including young children, to dinner? What hotel would offer the most romantic atmosphere for a getaway weekend?), you can use the forums to decide where you want to travel (What are the differences between Toronto and Montreal? Which Caribbean beach is best to visit in March?).

The Florida Forum (GO FLORIDA), complete with digital sunshine, is a compendium of information on this popular vacation site, including ticket and price information for Walt Disney World, current news releases from the top tourist spots and tips on special events.

Conferences are an ideal way to get fast information and immediate answers to questions. The Florida Forum's many conferences feature tourism officials, guests from Walt Disney World and occasional celebrity guests, such as Mel Fisher, the discoverer of a sunken treasure ship. In addition, the forum hosts a beach party on Monday nights and the Disney Trivia contest, where winners receive prizes, on Tuesday nights. Both conferences begin at 9 p.m. EST.

Leaving messages on the board is one of the best ways to get travel tips. Larry Wood, the Florida Forum administrator, says his crew spends a lot of time helping would-be Florida vacationers get the most for their time and money. Wood recounts a special instance in which a father wanted to bring his terminally ill son to Walt Disney World. Florida Forum administrators helped him with reservations and necessary special arrangements for the tour. Although the administrators went all out for this boy, Wood insists such treatment is not unusual.

The Travel Forum (GO TRAVSIG) is another place for finding hot tips and tales of travel. "It's a large world out there, full of mystery, surprise and adventure. We hope to bring as much of it as possible here to the Travel Forum," says Floyd Fessler, the forum administrator.

In addition to seeking advice from members on the message board, you can consult files in the data libraries that include such diverse offerings as restaurant reviews (the kind that only the natives know about), personal experiences in remote corners of the world, the ski season in Switzerland and trains of the future in Australia.

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Let OAG Electronic Edition Schedule Your Travel Arrangements

by Jim McCann

Thinking about making travel plans for that summer vacation, honeymoon or upcoming business trip? With the Official Airline Guide Electronic Edition, you can save time and money by conveniently booking flights from your personal computer.

The OAG Electronic Edition gives you control of your travel plans, allowing you to choose the most convenient schedule and the lowest fares possible. It provides unbiased information on direct and connecting flights for licensed airlines flying worldwide. And it lists domestic flights and fares together. After learning a few basic commands, you can complete the reservation process in 10 to 15 minutes.

Subscribers can choose from a variety of ticketing options, depending on the airline. Tickets can be picked up at the airport or local ticket offices or sent by mail. Or subscribers can purchase their tickets through Thomas Cook Travel. In addition to airline requests, Thomas Cook provides an online service for hotel reservations, car rentals and special-handling requests.

Three services have been added to the OAG Electronic Edition database: airline on-time performance, weather information and travel discount packages.

The Department of Transportation on-time performance rating is prepared monthly by the major airlines. Subscribers can check to see which flights have the best on-time record. Performance ratings appear in the last column of the schedule display. Single digit numbers from 0 to 9 indicate the percentage of on-time flight arrivals and departures. For example, a number 7 indicates the flight's on-time percentage was 70 to 79 percent during the reported month.

The weather information service provides tables listing average monthly high and low temperatures and number of rainy days for 37 North American cities and 16 international cities—a feature that can help travelers decide what clothing to pack.

The new Travel Discount Packages, offered by Thomas Cook Travel, provide hundreds of vacations that are not available to the general public.

The travel packages and weather information services can be found under the OAG command menu by selecting /T.

To access OAG, type GO OAG at any prompt on the CompuServe Information Service. Select "Accessing OAG EE" from the menu to start the reservation or information process. You can leave OAG Electronic Edition at any time prior to completion of the booking process by typing /Q.

If you have never used the service, you might find it helpful to first select "How to use OAG EE" from the OAG main menu. A list of commands on using the booking service can be found under this display. These commands differ slightly from the standard CompuServe commands so it may be wise to get a printout for easy reference.

Subscribers who are comfortable with the commands can use a fast-track method of booking flights. For example, to find schedule information, you can use a single line format: /S Departure City; Destination City, Date, Time. The OAG Electronic Edition will display up to six lines of schedules for the itinerary chosen.

For new subscribers, a step-by-step approach is available. Type /S to start the scheduling process and then type your departure city name or code—for example, Columbus or CMH. OAG will continue to prompt you for the information it needs to find the flights you want.

To find the code for a city, type ? and the name of the city and press the Return key. The same procedure can be used in reverse when trying to interpret a city or airline code. Type ? and the three-digit code of the city or airline; for instance, ? DLT refers to Delta Airlines.

When you enter your destination city's name or code, OAG will request a departure date; day first, then the three-letter abbreviated month and desired departure time; for example, 3 JUL 9A for July 3 at 9 a.m.

The OAG Electronic Edition will display up to six airline schedules on one screen, starting with the earliest flight for the itinerary chosen. To view later flights type +. To go back to an earlier flight type -.

To find the fares for a specific flight, type F and the line number of the flight. The OAG Electronic Edition will let you choose from several fare categories: first-class only, coach and business class fares, or advance purchase and excursion fares. Flights identified by an * carry limitations. To review limitations on flights, type L and the line number.

To find the availability of seats for a particular fare and to begin the flight reservation process from any schedule screen, type B and the line number of the flight.

If a round-trip was chosen, OAG Electronic Edition will prompt you for a return date and time from the city of departure and display airline schedules, similar to the process of booking your first flight.

If you have no set day to travel but are interested in getting the lowest fare, type /F Departure City; Destination City 99 to view all fares.

To continue the booking process, OAG Electronic Edition will prompt you for the number of seats needed, ticket delivery options and billing options. And once the booking process is completed, OAG Electronic Edition will display a confirmation number. To review or cancel the reservation at any time, type /C.

For information on hotels and motels for a destination city anywhere in North America, Europe and the Far East, type /H at any OAG prompt. You will be requested to choose the area of town you wish to stay in: downtown, airport or area surrounding the city. Once an area has been chosen, OAG will display a list of hotels, with additional information about rates, location and phone numbers to call for reservations.

For additional information, the OAG Help Desk is available 24 hours a day at 1-800-323-4000 to provide free training and to answer questions. There is a per-minute surcharge that varies in price depending on what time of day OAG Electronic Edition is used.

Jim McCann is an Online Today *editorial intern from Ohio State University.*

Need to Keep Up with the Computer and Information Industries?

We publish all the computer industry news every day in *Online Today Daily Edition*. GO OLT-90 from any prompt on the CompuServe Information Service.

ONLINE TODAY

Ask Customer Service

Q: Who shops via computer?

A: In-home shopping now accounts for about 27 percent of all retail sales in the United States. That adds up to more than $170 billion a year, and it's certain that figure will rise given the pressed-for-time lifestyle of today's affluent, two-income families.

CompuServe contributes to and benefits from that trend. It allows subscribers to buy the quality merchandise and services they want in a convenient, time-efficient manner—through their personal computers, 24 hours a day. Visit The Electronic Mall or Shoppers Advantage Club and see for yourself.

Q: The Electronic Mall has so many shops. Where do I start?

A: Each of The Mall's more than 80 shops has a unique GO command that allows you to directly access it. If you're not sure which merchant to go to first, you can shop by Mall departments, such as auto, hobbies/toys and computing. An Electronic Mall Index allows you to select the product you are looking for; then The Mall will tell you which store to visit.

The Electronic Mall publishes "This Week's Mall News" articles each week that will keep you up-to-date on bargains and other Mall news. If you have a question about The Mall or a Mall merchant, you can "Talk to the Mall Manager" online via EasyPlex.

To assist you in planning and minimizing your online connect time, CompuServe includes *Go Mall* every other month in *Online Today*. This guide to CompuServe's Electronic Mall introduces new merchants, tells you how to order products and highlights Mall contests or promotions. Hang on to this *Online Today* insert for the handy calendar of Electronic Mall events.

Q: Can I order software online?

A: All sorts of software programs are available in many different areas online. Besides the many Electronic Mall software distributors, CompuServe also sells software. Type GO ORDER to reach the CompuServe product ordering area. You can browse CompuServe's merchandise free of connect-time charges. Navigator, Professional Connection and VIDTEX software packages are available for IBM, Radio Shack, Apple, Commodore, and Atari machines. In CompuServe's Software Exchange area you can download new programs directly to your computer. SOFTEX enables you to search a catalog of software titles by model of computer, type of software, publisher and/or other interior. Type GO SOFTEX for more information or to leave a message for the SOFTEX manager.

Q: Can I browse and do some comparison shopping without making a purchase?

A: Sure. CompuServe's shopping services can prepare you for buying a product. For example, you can compare options and prices of new cars in the auto department of The Mall and in the New Car Showroom (GO NEWCAR). You might also find an interesting vacation or cruise package in The Mall, Hawaiian Concierge (GO HAWAII), or Sun 'N Sand Vacations (GO SNS).

These answers and more are available in Customer Service's Question & Answer Database. You can find answers to questions about billing, logging on, using forums, sending EasyPlex messages, using the Personal File area, setting up a Personal Menu and more. Type GO QUESTIONS at any prompt on the CompuServe Information Service.

Dave Johnson

Service is solution: *Fedrick*

Tip of the Month

Dawn Fedrick enjoys communicating with subscribers on a one-to-one basis and researching complicated problems. Dawn says, "Helping a subscriber to resolve a difficult situation makes me feel a sense of accomplishment."

Dawn advises subscribers who stumble across a problem online to refer to the CompuServe Information Service Users Guide and then to contact Customer Service at the toll-free number (800-848-8990 outside Ohio and 614/457-8650 in Ohio). "We will be glad to provide you with the best service possible," says Dawn, who is studying computer science at Otterbein College.

Read CompuServe News

Online Today Daily Edition covers the online community. Whether it's a forum conference announcement, a special promotion or a new product introduction, you can read all about it in the *Daily Edition*. To access news about the CompuServe community, type GO OLT-50 at any CompuServe Information Service prompt.

***COMPUSERVE THIS WEEK**	**OLT-50**
About Update	**OLT-60**
Community News	**OLT-80**
Conference Schedules	**OLT-120**
Online Today Guide	**OLT-351**
Previous Weeks' What's News	**OLT-270**
Uploads Updates	**OLT-3700**
What's New	**OLT-70**

Talk to Us

Online Today Daily Edition has a Feedback area for letters to the editor. Simply type GO OLT-33 from any prompt in the CompuServe Information Service.

ONLINE TODAY

Changing Your Password

The CompuServe Information Service urges its customers to change their passwords at least once a month.

The password should be a minimum of eight characters composed of two unrelated words separated by a symbol, for example: HOUSE*MAGNET.

To find out how to change your password, type GO PASSWORD.

Q&A Database Assists Subscribers

Got a question about the CompuServe Information Service? Chances are that CompuServe has the answer in the Questions and Answers database (GO QUESTIONS).

The Questions and Answers database contains answers to some of CompuServe subscribers' most common questions, ranging from billing to service-specific topics.

Information is broken down by category and displayed in question-and-answer format. The categories are billing, Log-on/system/access, EasyPlex/MCI Mail, forums, Personal File Area, first service/personal menu, Executive Option, Online ordering, CB Simulator, market quotes, National Bulletin Board, VIDTEX, uploading/downloading files, graphics and games.

Choose the category you're interested in from the main Questions and Answers menu, then select the appropriate question from the next menu. You'll receive a complete, detailed response to your question.

If you have a question that is not answered in the Questions and Answers database, you may pose your question directly to a CompuServe customer service representative through the Feedback to Customer Service area. Type GO FEEDBACK at any prompt.

Gift of Time

Online Today offers subscribers the chance to win 10 hours of standard service connect time (a $60 value) by writing a 200-word essay on how they use the CompuServe Information Service.

Your essay should be typed double-spaced. Send it to *Online Today*, CompuServe Incorporated, 5000 Arlington Centre Blvd., P.O. Box 20212, Columbus, OH 43220, or by an EasyPlex message to 70003,3246. Please include your full name, address and User ID number.

The winning essay will be published in *Online Today*.

Election '88 Coverage Helpful

As a long-time political activist and observer, I appreciate the advantages of the election coverage in Election '88.

During the presidential election in 1984, I spent countless hours searching newspapers and campaign newsletters to find the candidates' standing on issues. Now, with the help of CompuServe, I am able to find this and more in less time. I also appreciate the interactivity of subscribers in debating the issues, and the real-time feedback offered by the surveys. I can only imagine the services that will be offered in 1990.

Greg Davis
Bellevue, Wash.

Each issue of *Online Today* is filled with information which CompuServe subscribers benefit from having close at hand for reference.

Use these handsome binders and slip covers to store and protect your back and future editions.

Both styles of case are handcrafted in leather-like fabric, similar to the storage units used by libraries to shelve and preserve their periodicals. And the spines of all cases are embossed with the *Online Today* logo for easy identification on any bookshelf.

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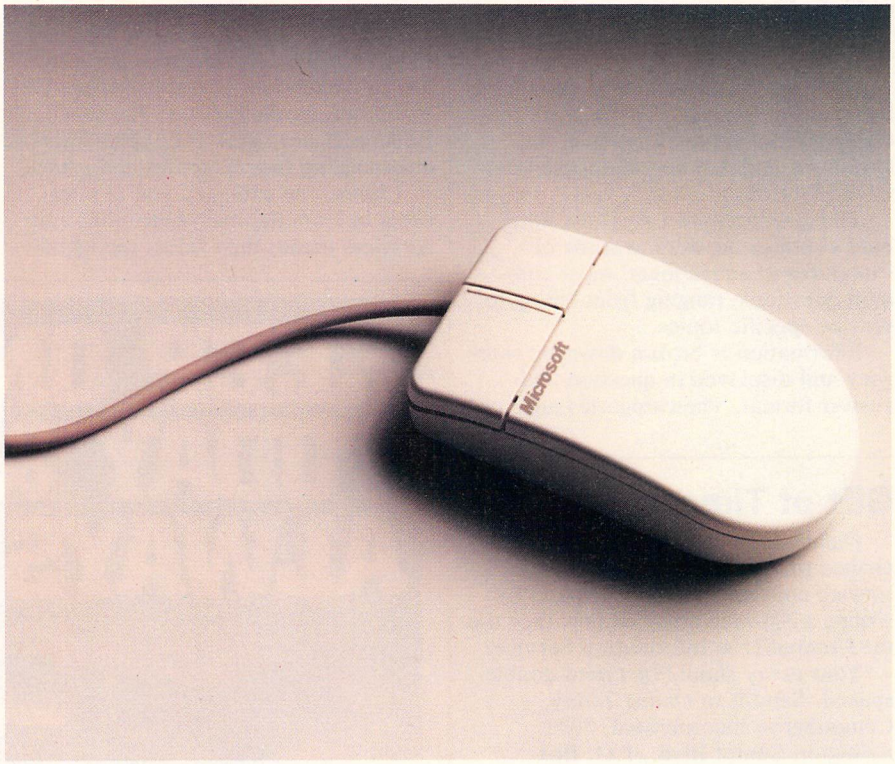
Microsoft's Mouse

Mouse Makes an Excellent Point

Microsoft Corp.
16011 N.E. 36th Way
Box 97017
Redmond, WA 98073-9717
206/882-8080

Computers: IBM PC, PC-XT, PC-AT, PS/2 and 100 percent compatibles.
Operating System: MS-DOS or PC-DOS version 2.0.
Features: Two-button design reshaped for comfortable handling; relocated roller ball operates on any surface; 200 ppi resolution; software-adjustable sensitivity; interfaces directly to Microsoft InPort Device Interface connector or via adapters (included) to 25-pin PC-style, 9-pin AT-style or 6-pin PS/2-style serial port (COM1 or COM2 only); easily disassembled for cleaning; new "lifetime" warranty policy; driver, setup, tutorial, specialized menu and graphics application software included on both 5.25-inch and 3.5-inch diskettes.
Requirements: Mouse driver needs 11K of RAM; memory-resident control panel software needs 33K of RAM if used; tutorial requires 192K of available memory; serial version needs serial port; bus version needs expansion slot for bus adapter; all versions need graphics-capable video adapter (CGA, EGA, VGA or Hercules compatible).
Options: Available in serial or bus configurations; available in packages containing three different software applications.
Model Tested: Serial Microsoft Mouse alternately connected to 1024K Proteus 268GT computer (AT-compatible) using built-in serial port and running at 6 MHz and 12 MHz under PC-DOS 3.10 and to a 640K Compaq Deskpro (PC-compatible) using serial port on an STB Systems RIO Plus II multifunction card and running under Compaq MS-DOS 3.10.
Prices: $150 with Microsoft Paintbrush software; $200 with Microsoft Windows 2.0 and ZSoft's PC Paintbrush for Windows; $175 with Evolution Computing's EasyCAD; $25 for Programmer's Reference Kit for customizing mouse menus.

Reviewed by Ernest E. Mau



Mouse makes maximum movement: *Microsoft's 'Complete' Mouse*

In September 1987, Microsoft introduced a new mouse. What makes this one unusual is that it accommodates the shape of the human hand and corrects deficiencies that make other mice tricky to use accurately.

The mouse now has a nicely curved shape that fits neatly and naturally under a user's hand. There are no squared corners to make handling awkward.

Two large-surface buttons are flush with the top of the mouse and fit perfectly under the first and second fingers of either hand. My large hand and long fingers rest comfortably on this mouse, which is a novel feeling for me. Unlike some mice, the buttons require little pressure, so no contortions are needed to get fingertips directly on the buttons.

Microsoft also moved the tracking roller, putting it under the fingers instead of the palm. Holding this mouse in a natural position, the ball centers between my fingers at the second joint of my forefinger. That makes an amazing difference in control. With mice that put the tracking mechanism under the palm, I have to move my whole hand, wrist or arm to point. That doesn't provide the delicate control I want for graphics work. With Microsoft's mouse, I can adjust positioning precisely with gentle finger movements.

I also have better control when clicking buttons. Many mice give me trouble with the screen cursor moving out of position as I click, so I waste considerable time placing and erasing points before hitting the spot I want. Microsoft's new mouse works so effortlessly, it is easy to hold a cursor in position when clicking. In fact, the forward-placed tracking roller helps because button pressure seems to stabilize the ball. With rear-mounted tracking mechanisms, pressing buttons can pivot the mouse, lighten tracking pressure and let the ball or wheels slip.

There is always some debate about the merits of a single tracking ball versus two perpendicular wheels. Having used both, I prefer Microsoft's single ball. First, it is easy to clean (all mice get dirty). Second, it provides smoother diagonal movement. Mice with perpendicular wheels tend to skip or move erratically on the diagonal and take extra effort to always move in the directions the wheels point.

Yet the Microsoft Mouse may be too sensitive for someone used to more primitive devices. To avoid overrunning targets, I usually have to pop up Microsoft's memory-resident control panel software and decrease sensitivity to 15 or 20 percent of maximum (50 percent is the default).

The buttons have such a light touch

that the weight of resting fingers can click them accidentally, and button sensitivity isn't adjustable. Of course, practice improves performance.

My serial mouse came with basic mouse-driven menus for dBase III Plus, Lotus 1-2-3, Lotus Symphony 1.2, Multimate Advantage II, PFS: Professional Write and WordStar 3.3 or 4.0. It also had expert menu software for DisplayWrite 3, Multimate and 1-2-3. The Symphony and WordStar menus both provided some interesting variations on program control. I've never been thrilled with mouse-driven word processing, but the WordStar menus and cursor control were interesting enough that I could grow to like them.

Some competitors include tools to create custom menus for other applications that normally don't support mice. However, Microsoft sells a separate Programmer's Reference Kit for that purpose. I think those tools should have been included with the mouse.

My package also included Microsoft Paintbrush, a version of ZSoft's free-standing (non-Windows) PC Paintbrush. It isn't the most elaborate draw-and-paint package around, but it does a respectable job and helps new users become familiar with graphics and mouse manipulations.

A crucial consideration is compatibility with commercial software. I reconfigured more than 100 products to accept a Microsoft Mouse, ranging from games and simple drawing programs to sophisticated CAD packages. Some were several years old, others were new, and some had balked at off-brand mice. All but one worked with the new Microsoft Mouse and its version 6.11 driver. The exception was a CAD package called ProDesign II (version 2.5) that wouldn't work even though it has a Microsoft Mouse configuration option. Given its new design, improved performance, high sensitivity, impressive precision and near total compatibility, new Microsoft Mouse seems the best choice among pointing devices. Just as Hayes set a standard for modems and Hewlett-Packard set a standard for plotters, Microsoft sets the standard for mice. Virtually any software that supports any mouse will support Microsoft's. That can't be said for the competition.

Ernest E. Mau, a full-time, free-lance writer and Online Today *reviews editor, is based in Aurora, Colo. He is the author of several books and nearly 300 articles on microcomputer products and applications.*

GO OLI or circle 17 on the Reader Service Form.

Go Online for More Hardware Reviews

The following hardware reviews are available this month in *Online Today Daily Edition* (GO OLT-220)

NEC MultiSpeed EL Laptop Computer
Manufacturer: *NEC Home Electronics.*
Computer: *NEC MultiSpeed EL (MS-DOS).*

Sun 3/50 UNIX Workstation
Manufacturer: *Sun MicroSystems*
Computer: *Sun 3/50 with Sun OS.*

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4-Word

Adds Word Processing to Lotus 1-2-3

Turner Hall Publishing
A Division of Symantec
10201 Torre Ave.
Cupertino, CA 95014
408/253-9600 or 800/556-1234

Computers: IBM PC, PC-XT, PC-AT, PS/2 and compatibles.
Operating Systems: PC-DOS or MS-DOS version 2.0 or higher.
Media: Supplied on 5.25-inch diskettes; also available on 3.5-inch diskettes; requires two diskette drives or one diskette drive and a hard disk.
Copy Protection: None.
Required Peripherals: Printer.
Other Requirements: Minimum 320K RAM (takes 60K in addition to RAM required for 1-2-3); needs 1-2-3 version 2.0 or higher.
Optional Items: None.
System used for test: 640K IBM PC-XT with Hercules Graphics Card Plus, two diskette drives, MiniScribe 30MB hard disk and LaserJet Series II printer; running PC-DOS 3.3.
List Price: $99.95

Reviewed by William J. Lynott

When Lotus decided to help programmers devise add-ins for 1-2-3 (release 2 or above), many developers jumped on the bandwagon. Not surprisingly, word processing received much attention. Most 1-2-3 users wish that Lotus provided 1-2-3 with more than the primitive word processing capabilities typical of most spreadsheets. While 1-2-3 does a first-class job of number-crunching, it falls woefully short at manipulating words. And, it doesn't permit merging text and graphics into the same document.

Turner Hall's 4-Word was among the first 1-2-3 word processing add-ins to enter this ready-made market. It uses the Lotus Add-In Manager to attach itself directly to the 1-2-3 program. This interface actually integrates 4-Word with 1-2-3, making it a part of the program.

Although it did a good job of manipulating text in its original version, the early 4-Word was unable to integrate graphs into documents it produced. This proved a serious shortcoming that was quickly exploited by its competitors.

In version 2.0, 4-Word has taken care of that problem with a new utility it calls 4-Graph. Now it can merge both spreadsheets and graphs into its documents. This modification alone makes 4-Word a much more serious competitor in the Lotus add-in market.

The 4-Word system enables you to create text from within the familiar 1-2-3 environment. Because 4-Word works in the 1-2-3 environment and uses the same types of nested menus and commands, it is easy for 1-2-3 users to learn. While in text mode, the screen still displays the 1-2-3 rows and columns with entered text displayed as a left-aligned label in the current column. A function key sequence that you may specify switches quickly between spreadsheet and word processing functions. When you switch back to the linked spreadsheet, any text created in word processing mode is retained.

Although spreadsheet data already present will be retained in columns where text is entered, you cannot alter any spreadsheet numerical data while working in text mode, though you can edit text labels. Once you switch to the word processing function, all numerical data are frozen until you go back to the spreadsheet.

This may be regarded as a safety feature since it prevents accidental changes to spreadsheet data while in word processing mode. On the flip side, it means you must switch between spreadsheet and text modes to make even a minor change in linked spreadsheet's data. Some other add-in word processors allow changes in spreadsheet data while in either mode.

The 4-Word add-in is by no means a highly sophisticated word processor, but it does offer all of the basic features you'd expect of today's low-end word processing packages. It lets you right-justify and center text, and it will import ASCII files from other word processors or text editors. Other features include bold and italic type, underlining, superscripts and subscripts. Unlike typical stand-alone word processors, though, some of these features are a bit cumbersome to access. And printer codes such as those for underlining or bold printing are visible on the screen—a distraction most modern word processors have done away with.

The mail-merge feature in 4-Word may well be its most valuable attribute for many users because it can merge names and addresses from a 1-2-3 database into a form letter to produce personalized mailings. I tested this function with a small database and found that it works smoothly. Since the 1-2-3 database capability is limited, using it as a straight mailing list with the 4-Word mail-merge produces a practical combination that will be adequate for many mailing list maintenance chores.

If you expect to work with elaborate or lengthy documents and graphics, you may be more satisfied with a stand-alone word processor and one of the popular screen-capturing programs. These utilities can capture screen illustrations such as 1-2-3 graphs, convert them for import into text programs and even enhance them through their own editing facilities. However, if you already are a 1-2-3 user and feel the need to incorporate basic word processing capabilities into spreadsheet projects, the 4-Word package may be just what you need.

William J. Lynott is president of W.J. Lynott Associates, a management consulting firm in suburban Philadelphia. His CompuServe User ID number is 70007,420.

GO OLI or circle 10 on the Reader Service Form.

Go Online for More Software Reviews

The following software reviews are available on *Online Today Daily Edition* by typing GO OLT-230 at any CompuServe Information Service prompt. Many daily-edition and some print-edition software reviews are supplemented with GIF graphics that may be viewed in or downloaded from Data Library 6 of the *Online Today* Readers' Forum (GO OLTFORUM).

Fantavision Motion and Special-Effects Graphics
Manufacturer: *Bröderbund Software.*
Computer: *Apple IIgs.*

Inset 2.1C and HiJaak 1.0B Screen Capture Programs
Manufacturer: *Inset Systems Inc.*
Computers: *IBM compatibles.*

Generic 3-D Solid Modeling CAD
Manufacturer: *Generic Software Inc.*
Computers: *IBM compatibles.*

Ability Plus Integrated Software
Manufacturer: *Migent Inc.*
Computers: *IBM compatibles.*

Your Personal Investment Manager
Manufacturer: *Timeworks Inc.*
Computers: *IBM compatibles and Tandy.*

Checks and Balances Financial Management
Manufacturer: *CDE Software*
Computers: *IBM compatibles.*

Disk Watcher Utility
Manufacturer: *RG Software Systems.*
Computers: *IBM compatibles.*

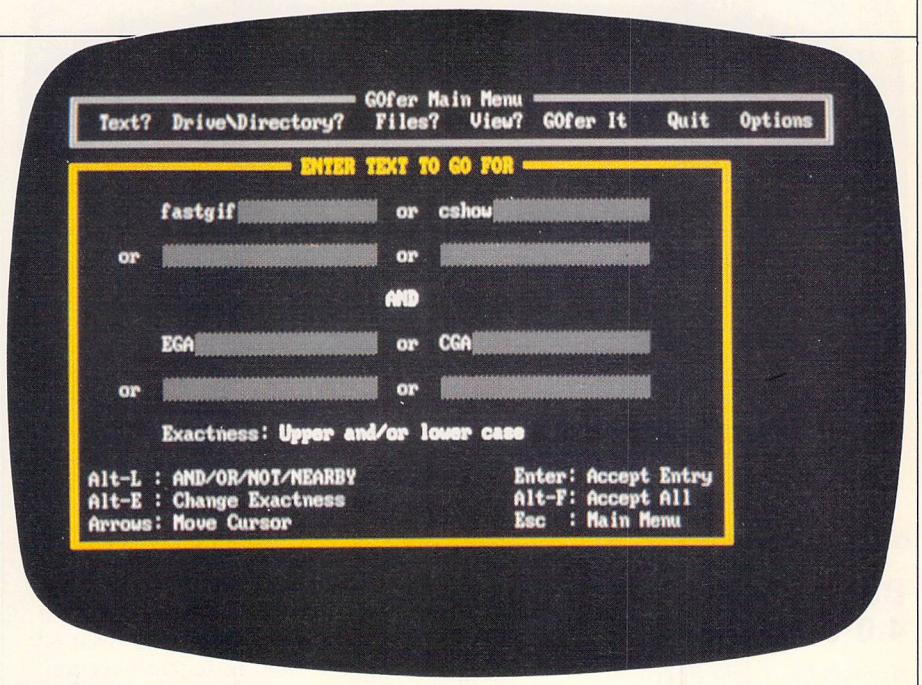
GOfer

Memory-Resident or Stand-Alone Search Tool

Microlytics
300 Main St., #126
East Rochester, NY 14445
716/377-0130 or 800/828-6293

Computers: IBM PC, PC-XT, PC-AT, PS/2 series and PC-compatibles.
Operating Systems: PC-DOS or MS-DOS 2.0 or higher.
Media: Distributed on one 5.25-inch diskette; 3.5-inch diskette available on request at no extra charge, but requires return of original 5.25-inch diskette; requires one diskette drive, but hard disk is recommended.
Copy Protection: None.
Required Peripherals: Color or monochrome video card and monitor.
Other Requirements: Memory-resident operation requires 79K of RAM; minimum 256K total RAM recommended.
Optional Items: Hard disk (recommended); printer; supported word processor, spreadsheet or database management software.
System used for test: 512K Victor V286 computer with one diskette drive, 20MB hard disk, EGA video card, color monitor and Apple Laserwriter.
List Prices: $59.95 introductory price; $79.95 regular price.

Reviewed by Franklyn Jones



Going for search-and-retrieve information: *GOfer*

Over the years, many software companies have introduced utilities that pick up where the limited DOS commands leave off. One of the newest is GOfer (version 1.0), based loosely on the FIND command within DOS. However, unlike FIND or many other search tools, GOfer can be memory-resident, and it requires no indexing. GOfer will search and retrieve information in any file or directory, anywhere on your disks, at a blazing speed.

Before using GOfer, it is a good idea to run the setup program to customize the package. During the setup, GOfer prompts you to select programs and files you'll be using often. GOfer supports more than two dozen programs, including but not limited to Lotus 1-2-3 and Symphony, Microsoft Word, Multimate and WordStar, plus generic ASCII files. The setup also prompts you to select the "hot key" you wish to use to activate GOfer. It's important that you select a key combination (e.g., [ALT-G] or [CONTROL-W]) that will not conflict with the applications programs you run. But if you discover any compatibility problem, you can run the setup program again to correct it.

Once you start GOfer, you'll see a text-entry window that takes advantage of Boolean logic to provide a variety of search options. For example, you can search for one specific word, or you can search for several words in combination with other words using AND/OR/NOT/NEARBY qualifiers. You also can specify upper or lowercase, demand exact matching or request anything close.

After defining your text selection, the next step is to tell GOfer where to look. Again, the options are impressive. You can search an entire hard disk, specific directories or files with certain extensions. Furthermore, you can select files by date stamp or manually select as many as 500 individual files. Once the selection process is complete, GOfer goes to work. In just a few seconds, it is ready to display the results, showing one "find" at a time. Because GOfer keeps all pertinent data in memory, you can scan through every find in all your files with amazing speed.

GOfer comes with a cut-and-paste facility that enables you to locate text, mark it and export it to your current application. There is, however, a caution here: If you work with files from more than one applications program, you will likely have to experiment with GOfer's program settings to achieve successful data transfer from one program's file type to another. For example, I had to modify the Piping Delay and Insert status to successfully transfer data from Microsoft Word to WordStar. In addition, Microsoft Word can be run only in the character mode if you plan to use GOfer. If you have several different applications on your hard disk, be prepared to make adjustments for each application, but the manual will help you.

GOfer's documentation is only about 80 pages long, but it is fairly complete. The booklet has tutorial and reference sections, plus a list of error messages and special instructions for modifying GOfer to work with certain applications programs.

Despite the customization required, GOfer works extremely well. Nevertheless, it isn't useful to everyone. In fact, unless you have a hard disk crammed with a great many files and directories, you might not have any need for GOfer at all. GOfer is perhaps best suited for lawyers, accountants, librarians, prolific writers or similar users to whom fast information retrieval is a must. If you have such needs, you'll want to evaluate GOfer. If you don't, the FIND command in MS-DOS may be all you need to occasionally locate a filename.

Franklyn Jones was formerly the managing editor of Interface Age *magazine and editor-in- chief of* IBM PC Update *magazine. He has written articles for various computer publications, is a regular contributor to* Online Today *and serves as a marketing and communications consultant.*

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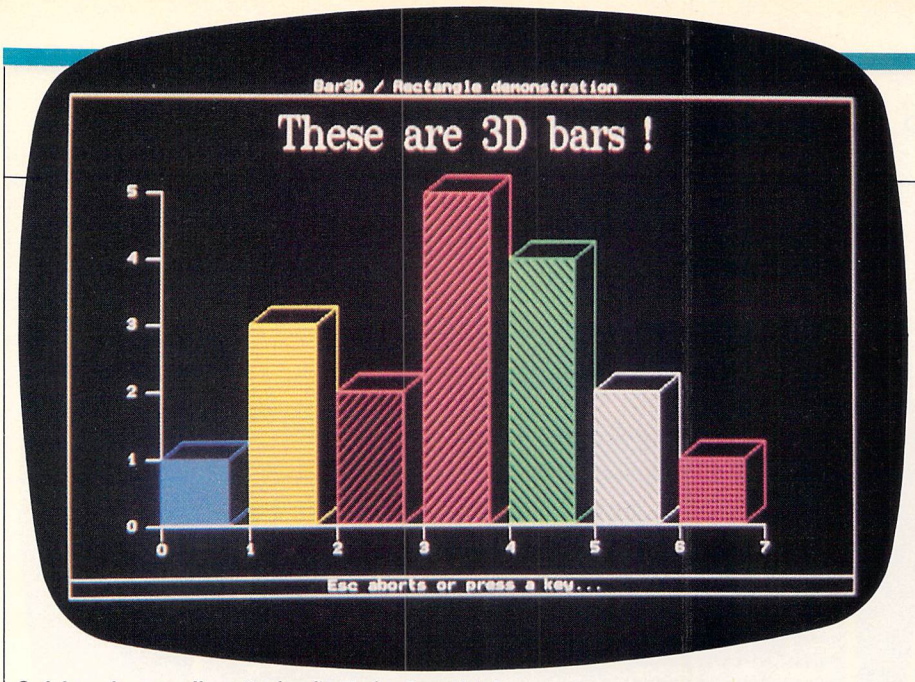

Quick code compiler: *Borland's Turbo Pascal 4.0*

Borland's Turbo Pascal 4.0 Compiler

Approaches Light Speed

Borland International
4585 Scotts Valley Dr.
Scotts Valley, CA 95066
408/438-8400

Computers: IBM PC, PC-XT, PC-AT, PS/2 and compatibles.
Operating Systems: PC-DOS or MS-DOS version 2.0 or higher.
Media: Supplied on three 5.25-inch diskettes or one 3.5-inch diskette; requires one diskette drive.
Copy Protection: None.
Required Peripherals: None.
Other Requirements: 192K RAM for command-line version of compiler or 384K for integrated-environment version.
Optional Items: Turbo Pascal Developer's Library (version 4.0) consisting of Turbo Tutor and Turbo Pascal Database, Editor, Numerical Methods, Graphix and Gameworks Toolboxes.
Systems used for test: (1) 512K IBM PC with one 360K diskette drive; (2) 640K IBM PC with 20MB hard disk; both running PC-DOS 2.1.
List Price: $99.95 for 5.25-inch diskettes; $15 additional for 3.5-inch diskettes.

Reviewed by James Moran

Turbo Pascal (version 4.0) is a structured, high-level language that can be used to write a program for virtually any use on an IBM computer. This is the most recent incarnation of Borland's well-known implementation of Pascal, and it is appreciably quicker than the previous version.

Turbo Pascal now compiles code at up to 27,000 lines per minute. That is two to three times faster than version 3.0 could manage. Execution speeds also have increased 25 to 30 percent. Users of math coprocessors will find improved execution speeds immediately since it is no longer necessary to order a special implementation package to take advantage of an 8087 or 80287 coprocessor.

Installation requires only a few copy commands. However, users short on disk space will have to decide whether to run Turbo Pascal from a diskette or a hard disk.

There are actually two compilers on the distribution diskettes. The first is the "integrated environment" and provides a multiwindow environment with pull-down menus. Turbo Pascal programs can be edited, saved, loaded, compiled and run without leaving the environment. The second "command line" compiler, is for users who now program with a similar command-line Pascal, prefer another editor or use extensive external (assembler) subroutines.

If you have space available, you can install both compilers. However, except in unusual circumstances, most users should go with the integrated environment. It is the easiest to get used to, and provides in one place all the programming and debugging facilities you'll need.

Although Turbo Pascal programmers will appreciate the speed improvements in version 4.0, Borland has loaded this product with improved features. This is the first Borland language product that includes the Borland Graphics Interface, which is a graphics standard the company promises will be supported by all Borland languages. Since BGI eventually will be in all Turbo languages, a common set of device drivers can be used for all systems and applications packages with BGI support.

Another improvement is a built-in linker, the lack of which caused frequent complaints from users of earlier versions. The linker is smart enough to examine code and remove any unused sections at link time. The result is smaller execution modules. Furthermore, the memory constraint on ".EXE" modules has been removed, and programs no longer are restricted to 64K.

Several new data types have been introduced in Turbo Pascal, and four new floating-point types are included for users of math coprocessors. Several programming changes that affect some Turbo Pascal functions also have been made. Often, the changes are meant to eliminate inconsistencies in Turbo Pascal or combine functions into built-in procedures.

Although much of the code generated by Turbo Pascal is less massive, the manual now approaches the gargantuan. Weighing in at three pounds and having 654 pages, it is a well-written book that is really two manuals—a user guide and a technical reference—combined into a single volume. While many developers crow about their "easy-to-use" manuals, Borland deserves special recognition for this one. Those new to programming (of any type) and those with experience will appreciate the manual's clarity and usefulness.

As with all Borland Turbo products, Turbo Pascal has made its reputation on speed. In casual benchmarks that compared version 3.0 against version 4.0, there was no doubt that the most recent update lives up to its billing. The only major problem I'm aware of affects a Paradise AutoSwitch EGA card, and users report that Paradise is aware of the problem that causes blurred or unusual screen displays.

Turbo Pascal continues to be a language product that is exceptionally efficient. With the most recent improvements, Borland shows that it intends to make the software easier to use. If you want to program in Pascal, Turbo Pascal is still the best product around for the price.

James Moran is a free-lance writer and frequent contributor to Online Today. *His CompuServe User ID number is 70007,2253.*

GO OLI or circle 12 on the Reader Service Form.

MathCAD 2.0:

Better Than Ever at Problem Solving

MathSoft
One Kendall Square
Cambridge, MA 02139
617/577-1017 or 800/628-4223

Computers: IBM PC, PC-XT, PC-AT, PS/2 and compatibles.
Operating System: PC-DOS or MS-DOS version 2.0 or higher.
Media: Requires one 360K diskette drive or a diskette drive and a hard disk.
Copy Protection: None.
Required Peripherals: Graphics-capable video card and monitor (supports CGA, EGA and monochrome Hercules Graphics Card).
Other Requirements: Minimum 512K RAM; also supports LIM (Lotus/Intel/Microsoft) Expanded Memory Specification.
Optional Items: Math coprocessor recommended; graphics-capable printer or plotter required for printing graphics.
System used for test: 640K Compaq Deskpro 286 with one 1.2MB and one 360K diskette drives, one 40MB hard disk, Vega VGA board, NEC Multisync monitor and Hewlett Packard LaserJet printer.
List Price: $349

Reviewed by Harry Green

MathCAD is a problem-solving program that's almost as good as having the answers in the back of a textbook. You can work nearly any problem that has a numeric solution, including differential and integral calculus.

This is not to say that MathCAD's primary application is in the classroom. On the contrary, it takes too long to set up a problem to be worth the effort for a single solution. Its real value is in repetitive solutions or solving complex equations with a range of values, and then graphing the results.

Compared with other math programs I've used, MathCAD's outstanding feature is its user interface. Instead of the confusion of nested parentheses, asterisks and slash marks that characterize most formulas written on a computer, MathCAD displays the formula as it would look in a textbook. When you type asterisks, MathCAD converts them to the dots that signify multiplication. Slash marks are converted to horizontal lines with the numerator and denominator of the equation clearly separated.

Once you escape the limitations of conventional keyboard symbols, the results are satisfyingly logical and easy to edit. You must learn a new keyboard language, but the key assignments are rational to the mathematically inclined. An ampersand, for example, becomes the uppercase "sigma" that represents an iterative series of calculations. The Alt key combined with letter keys produces corresponding Greek characters, so if you learned the Greek alphabet in your college days, you've already learned half of MathCAD's symbols.

To set up a problem, you begin by defining variables and assigning values to them. Next, you write the equation below the variables. When you type an "equals" sign, MathCAD solves the problem. If you make an error, the program draws a box (red on a color monitor), describes the error and draws an arrow directly to the offending location. Compared with other programs, including most spreadsheets that merely beep and refuse to calculate when you've made a formula error, MathCAD's interface is outstanding.

To solve for a range of values, you can enter limits as two figures separated by a semicolon, which causes MathCAD to create a table below the last formula. With a few keystrokes, you can graph the results on the same screen. The program provides several features for rearranging the display. By typing "separate" on the command line, the program separates overlapping areas. Cut-and-paste keys enable you to delete, move and duplicate portions of the display.

Although MathCAD's interface is excellent, the program requires more mathematical sophistication from the operator (the one who uses it, not the person who set up the formula) compared with other math programs. Some programs have an input form that insulates the operator from the symbols and formulas, but a MathCAD operator works on the same screen containing the formulas. If you're familiar with math, this is an advantage because the whole problem and its formulas, variables, tables and graphs are displayed on the same screen. Other programs make you switch to different displays to see a global picture. Yet if you're not mathematically literate, the display may be confusing, even though MathCAD provides an excellent method of documenting directly on the screen.

MathCAD's screen-splitting feature enables you to display two files and to cut-and-paste and move information between windows. However, you cannot view two parts of the same problem simultaneously. This is a drawback when you want to change a variable and see its effect without scrolling to another part of the screen. Scrolling can be time consuming because MathCAD redraws the screen and may have to recalculate as you scroll unless you turn off automatic recalculation.

The program comes with several applications that illustrate MathCAD's versatility and may be valuable to some users. And it has a wide range of built-in functions, including all standard trigonometric and statistical functions plus some that are more specialized. Fast Fourier transforms, Bessel functions and complex number functions, as well as vector and matrix functions, are included.

If you've used earlier versions of MathCAD, you'll find operating version 2.0 is essentially unchanged. Programs that worked on version 1.1 (reviewed in *Online Today*'s August 1987 print edition) work well on version 2.0. But the new release adds features and supports backsolving, which finds the inputs when a problem's solution is known. It also supports matrix math and automatic plot scaling along with several lesser modifications.

In all, MathCAD is a highly recommended program in a field that's becoming crowded with entrants.

Harry Green is a free-lance writer from Portland, Ore. He writes about telecommunications, office automation and personal computer-related topics. His CompuServe User ID number is 70007,431.

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ONLINE TODAY

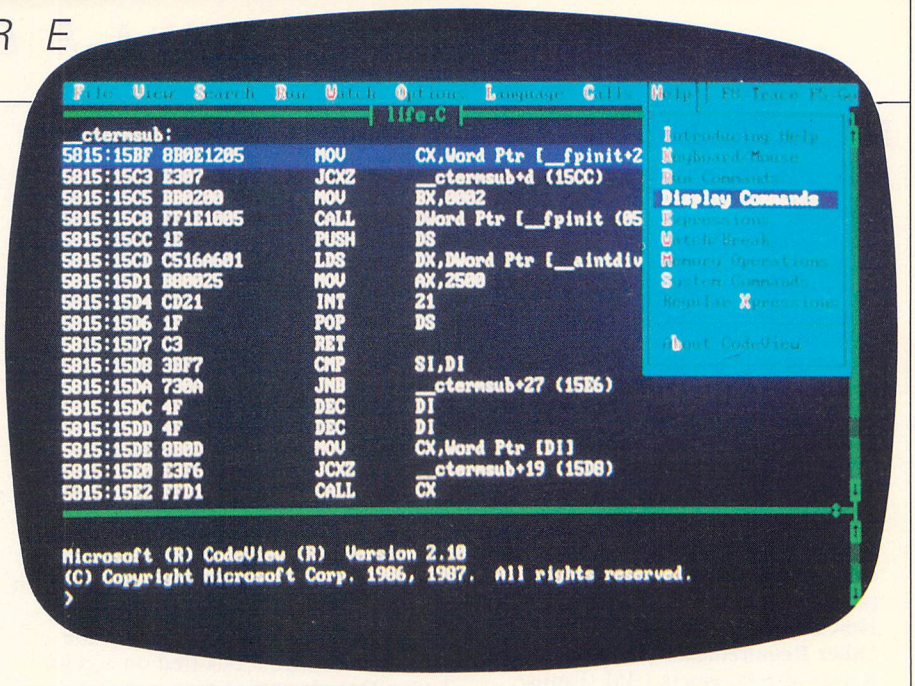
Microsoft's New C 5.0

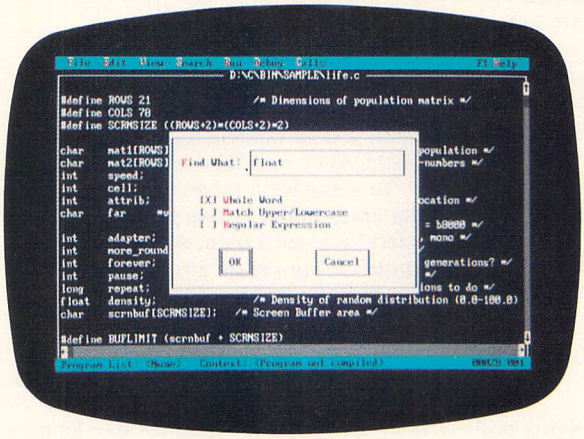
Optimizing Compiler and QuickC 1.0

Microsoft Corp.
16011 N.E. 36th Way
Box 97017
Redmond, WA 98073-9717
206/882-8080

Computers: IBM PC, PC-XT, PC-AT, PS/2 and compatibles.
Operating System: PC-DOS or MS-DOS version 2.1 or later.
Media: C 5.0 is supplied on nine 5.25-inch diskettes, including QuickC (contact dealer or manufacturer for information about 3.5-inch diskettes); two diskette drives or a hard disk are strongly recommended.
Copy Protection: None.
Required Peripherals: None.
Other Requirements: Memory requirements for C 5.0 are unspecified; minimum 448K free RAM required for QuickC.
Optional Items: QuickC editor includes support for 43-line mode on EGA/VGA systems and a Microsoft-compatible mouse; C 5.0 compiler includes special support for math coprocessor.
System used for test: 2MB AST Premium/286 computer with 80287 math coprocessor, Genoa SuperEGA HiRes Video Adapter, Sony Multiscan monitor, 80MB hard disk and Logimouse C7 mouse; running MS-DOS 3.2.
List Prices: $450 for C 5.0 compiler; $99 for QuickC if purchased separately.

Reviewed by Hardin Brothers





Powerful potential as programming tool: *Microsoft's C 5.0*

Microsoft's compilers long have been among the best available for MS-DOS computers. Undoubtedly, developing compiler technology and increasing competition from other software publishers have contributed to the high quality of their newest compiler, Microsoft C 5.0.

There's much to like in this new version: faster compilation speeds for most programs, new forms of code optimization, many new library functions, improved documentation, support for code that will be stored in ROM and closer compliance with the proposed ANSI C standard. Version 5.0 is packaged with faster and more powerful Link and Lib utilities, a new version of Microsoft's CodeView source code debugger, Microsoft's QuickC compiler and essentially the same Make utility as version 4.0. Also, for the first time, Microsoft is making the source code of many library functions available for an additional fee.

The new libraries supplied with MSC 5.0 include more than 40 graphics functions, 10 functions that help manipulate and check a program's memory heap, 39 functions that provide direct access to DOS and BIOS services, and 20 miscellaneous functions.

Graphics functions allow pixel, color, palette and shape manipulations for the color graphics adapter, enhanced graphics adapter and VGA cards of the newer PS/2 machines. Like the color functions in BASIC, they support graphics drawn on the physical screen or on a virtual screen or viewport. However, no support is included for monochrome graphics adapters such as Hercules cards.

New DOS and BIOS functions don't cover the entire range of possible services, but they do free C programmers from having to write small assembly-language routines to access some hardware and software services that normally aren't accessible directly from a program. They're especially useful when needing to control peripheral hardware or intercept MS-DOS error messages.

Not only does MSC 5.0 compile significantly faster than previous versions, it can produce programs that run faster. The compiler can, if a programmer wishes, extensively optimize program loops. Also, the compiler now can write faster inline code for many functions that formerly required calls to library routines.

All these changes are important, especially for programmers writing professional-quality software. Yet there are some MSC 5.0 features that can be annoying at first. For example, former versions of the compiler could be invoked in two ways. One method told the compiler to produce a complete program, and the other made it produce an object file for later linking with other program modules. The sec-

ond method is missing from MSC 5.0, and its function has been transferred to the first command. Programmers who developed batch files to automatically compile their programs have to change those files; others have to learn a new set of compiler commands.

MSC 5.0 installation routines work well, but only for a hard disk with a couple megabytes of free space. The setup process merges multiple small library files on the distribution disks into individual large files for each memory model a programmer wishes to use. For a total library including graphics functions, resulting files are about 250,000 bytes each, but installation also needs an equal amount of extra space for a work area. Installation can be performed manually if you prefer (or if you are installing on diskettes), or it can be avoided completely if you want to conserve disk space.

Microsoft includes its new QuickC compiler (also sold separately) in the MSC 5.0 package. As its name suggests, QuickC is similar to Microsoft's QuickBasic programming environment. You can write a program, compile it, debug it and run it all from within the QuickC environment. Because you never need to leave its environment, QuickC allows faster program development than the normal edit, compile, debug and re-edit cycle. At the touch of a key or two, an online help facility displays information about C-language syntax, library functions, the C preprocessor and the QuickC environment. QuickC also includes code for many of the most-used C functions within the compiler, so it often can compile programs without using a linker to find and extract functions from a library.

QuickC could become a powerful programming tool and a useful standalone C compiler, but it exhibits some first-version problems common to many complex programs. It requires a great deal of free memory to run and doesn't coexist well with many memory-resident programs. Also, there's a conflict between QuickC and some early Western Digital hard-disk controllers, although both Microsoft and Western Digital have offered solutions to that problem (a new ROM from Western Digital and a new version of QuickC from Microsoft). And, there's at least one important bug in the compiler that has been acknowledged and discussed in the Microsoft Systems Forum on CompuServe (GO MSSYS). I've found QuickC valuable for working out difficult program logic that I later add to programs compiled with MSC 5.0. My biggest disappointment with QuickC, however, isn't the problems of the first release but rather its limited subset of the CodeView debugger. The syntax it uses to display variables is slightly different from CodeView's, so switching between the two can cause some annoyances.

I've long used Microsoft programming tools because I believed they were among the best available. MSC 5.0 has strengthened that belief, while QuickC demonstrates great potential that has yet to be completely realized.

Hardin Brothers is an associate editor of 80 Micro *and a frequent contributor to several other magazines.*

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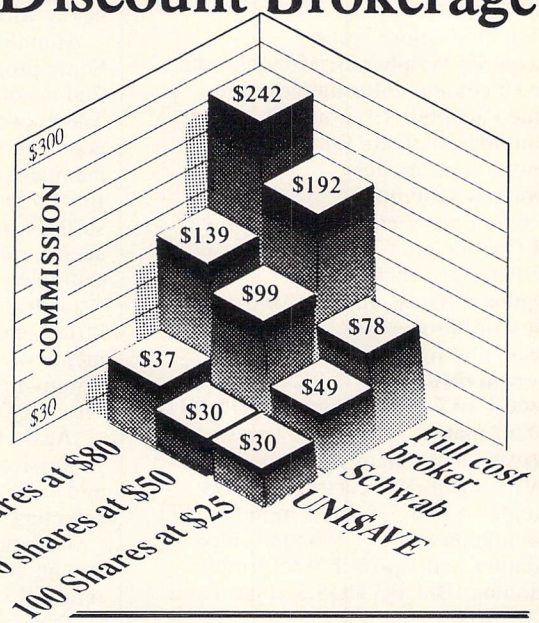

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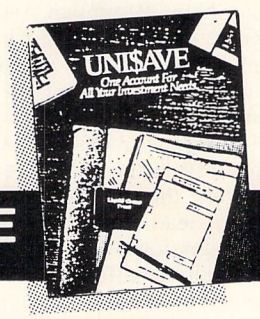

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Webster's New World Professional Thesaurus

Simon and Schuster Software
One Gulf+Western Plaza
New York, NY 10023
212/373-5800

Computers: IBM PC, PC-XT, PC-AT, PS/2 and compatibles.
Operating Systems: PC-DOS or MS-DOS version 2.0 or higher.
Media: Supplied on four 5.25-inch diskettes; requires one 360K diskette drive and a hard disk with at least 1.3MB of free space.
Copy Protection: None.
Required Peripherals: Monochrome or 80-column color monitor and video adapter (EGA and Hercules Graphics adapters fully supported only in text modes).
Other Requirements: Memory-resident program needs at least 64K of free memory (75K if online setup changes are enabled).
Optional Items: Supports most popular word processors, database managers and integrated packages.
System used for test: 1024K Proteus 286GT (AT-compatible) with 10 MHz 80287 math coprocessor, two diskette drives, 20MB hard disk, dual 15MB Sysgen DuraPak cartridge drives, Amdek Color 722 RGB monitor, ATI Technologies EGA Wonder video adapter and Epson FX-85 printer; running IBM PC-DOS 3.10 at 6 and 12.5 MHz.
List Price: $129.95

Reviewed by Ernest E. Mau

I've long admired Webster's New World word processing aids and have used Webster's New World On-Line Thesaurus daily since mid-1986, usually side-by-side with another thesaurus package. Now, Korenthal Associates, developers of the On-Line Thesaurus for Simon and Schuster Software, have come up with Webster's New World Professional Thesaurus.

This program obviously has been developed from the older one, but it doesn't take the smaller original off the market. Instead, it satisfies different users. Professional Thesaurus (version 1.0) has more to offer writers, business people and other demanding people.

Professional Thesaurus puts the entire *Webster's New World Thesaurus* on disk, not just a part of it as the earlier program did. So Professional Thesaurus boasts 300,000 synonym references compared with 100,000 for the On-Line Thesaurus. It claims to access more than 4 million replacement words. Most important, it recognizes about 30,000 root words and phrases, which should satisfy almost anyone. Of course, the dictionary disk file has grown. Professional Thesaurus uses a 1.2MB file, while On-Line Thesaurus used a 360K dictionary.

Like the On-Line Thesaurus, Professional Thesaurus isn't limited to single-word synonyms and includes complete phrases both as synonyms and search keys. It has "intelligent" handling of prefixes and suffixes, and it copes neatly with verb tenses and plural nouns.

Handling word endings is crucial. Some programs look up "smallest" and find synonyms for the root "small." The chosen synonym, say "little," then goes into the original text, and the user manually edits the word to "littlest." But Professional Thesaurus can strip suffixes, find synonyms for roots and attach suffixes to those synonyms. For example, it looks up "small" instead of "smallest" but offers "littlest," "most little" and "little" as possible replacements when "little" is the selected synonym. It doesn't offer "least large," "least big" or similar awkward choices.

Again like the On-Line Thesaurus, Professional Thesaurus can adjust "a" and "an" articles preceding words, so selecting "edict" as the synonym for "rule" automatically changes "a rule" to "an edict." And capitalization is retained when replacing a word.

Phrase handling is a welcome feature. Putting the cursor anywhere in a phrase like "as a rule" or "fair to middling" gets synonyms for the phrase, not just the word under the cursor. Choosing a synonym then replaces the entire phrase.

Of course, the user controls the features. A few keystrokes negate "a" and "an" changes, turn off prefix and suffix handling, stop showing alternative replacements or switch between word and phrase searching. And a "whoops" key can undo an unwanted replacement.

Professional Thesaurus now goes beyond showing parts of speech for words. It groups synonyms by both part of speech and meaning, with the exact meaning spelled out. Sometimes it goes farther and offers specifics. For example, some synonyms for "facing" are grouped under "an architectural finish." Within that, there's a special list such as "concrete" and "stucco" under the heading "facings include the following." A great touch!

A book-like structure is particularly attractive. The program displays pages that can be flipped like pages in a printed book. Alternate entry pages list keywords alphabetically and act like an index. And, the program has "see" and "see also" cross-references to related topics. In those, it identifies which of several referenced definitions might apply, as in "see front 4" that directs the user to the fourth definition of "front" for synonyms to "facade."

Synonyms can be queried to any desired depth, and a convenient automatic "retrace" list can back up to any earlier step. A separate note page keeps only entries the user wants, rather than a list of all steps. Thesaurus and original text screens can be swapped at a keystroke, so the context can be checked without exiting the thesaurus or losing the results of a partially completed search.

The only complaint I have is that Professional Thesaurus uses different command keys than the On-Line Thesaurus. Someone thoroughly familiar with On-Line Thesaurus can expect significant delays and keying errors. For example, Professional Thesaurus uses the Return key to make a replacement and F10 to look up another synonym in a chain, which is exactly opposite the On-Line Thesaurus pattern. Similarly, the "whoops" key has moved from F9 to Alt-F8, F2 now changes the setup instead of flipping pages, and PgUp and PgDn have new functions.

Yet I found no actual flaws in Professional Thesaurus, and it is now a permanent tool for my daily assignments. This serious synonym finder is easily worth its price to anyone who writes or edits for a living.

Ernest E. Mau, a full-time, free-lance writer and Online Today *reviews editor, is based in Aurora, Colo. He is the author of several books and nearly 300 articles on microcomputer products and applications.*

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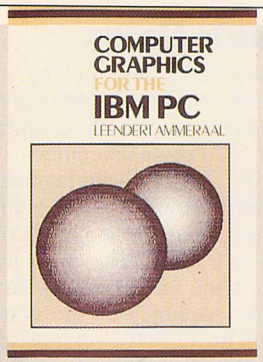
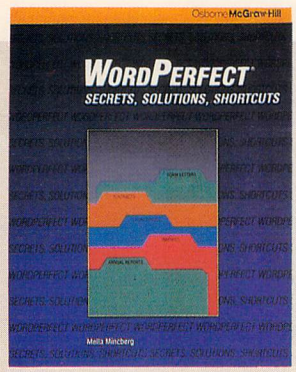


Computer Graphics for the IBM PC

By Leendert Ammeraal
John Wiley & Sons, 1987
141 pages, $19.95 (softcover)

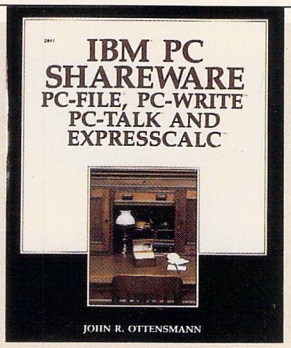
Designed as a university text and a guide for professional and advanced programmers, this book addresses several graphics features, including line drawing, updating the screen and interactive graphics. Reviewer Sharon Weizenbaum says the low-level graphics routines, presented in C, are for the programming whiz only.



WordPerfect: Secrets, Solutions, Shortcuts

By Mella Mincberg
Osborne McGraw-Hill, 1987
726 pages, $19.95 (softcover)

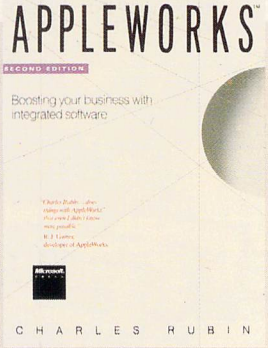
Although the book covers only WordPerfect versions 4.1 and 4.2 (not the newly released 5.0), reviewer Richard A. Danca lauds its style and content. With dozens of "tips and traps" that highlight program features and dangers, it covers the many intricacies of WordPerfect—sometimes better than the manual.



IBM PC Shareware: PC- File, PC-Write, PC-Talk and ExpressCalc

By John R. Ottensmann
TAB Books, 1987
246 pages, $15.95 (softcover)

As an approach to "low-cost computing," this book is a guide to the four most popular user-supported programs. Reviewer Lindsy Van Gelder says there is much to recommend it, especially to the software buyer on a budget.



Appleworks: Boosting your Business with Integrated Software (second edition)

By Charles Rubin
Microsoft Press, 1987
299 pages, $18.95 (softcover)

This book offers dozens of tips and helpful hints to Appleworks users who may not be taking full advantage of its many features. Reviewer Brian D. Monahan says the book is especially useful for software integration.

Invitation to "C" Programming Language

By Lawrence L. McNitt
Petrocelli Books, 1987
418 pages, $24.95 (softcover)

This book aims to give the reader an understanding of the features of C and to demonstrate how the language can be applied to a variety of programming problems. Reviewer Ben Knox calls it a formal book, but says it will give the persevering reader a good background in the language.

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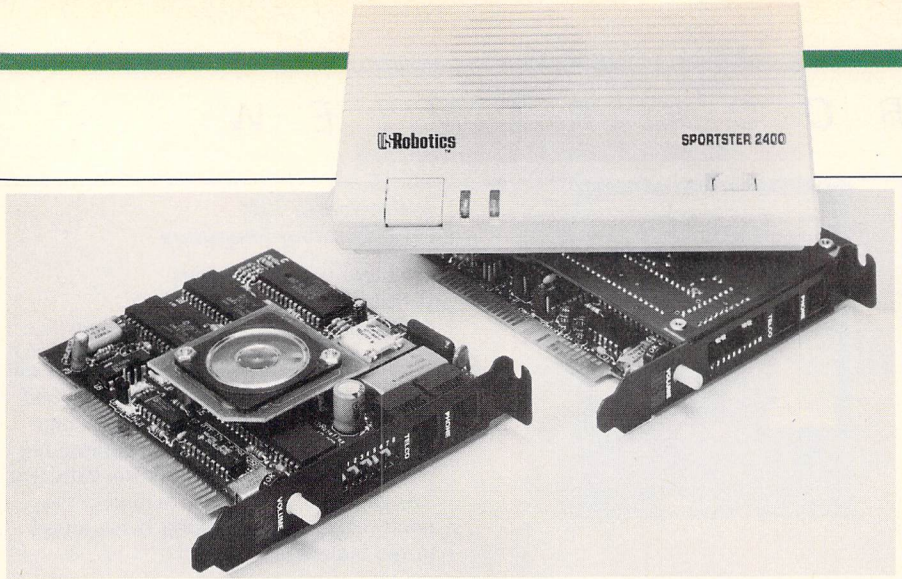


Sportster Modems

US Robotics has introduced three new 2400- and 1200-baud Sportster modems.

Ranging in price from $139 to $239, the modems include an external 2400/1200/300 model, an internal PC 2400/1200/300 unit and an internal PC 1200/300 baud version. The modems are included with US Robotics Telpac data communications software and installation program. Each is an auto-dial, auto-answer modem using the industry-standard AT modem command set for compatibility with all popular data communications software.

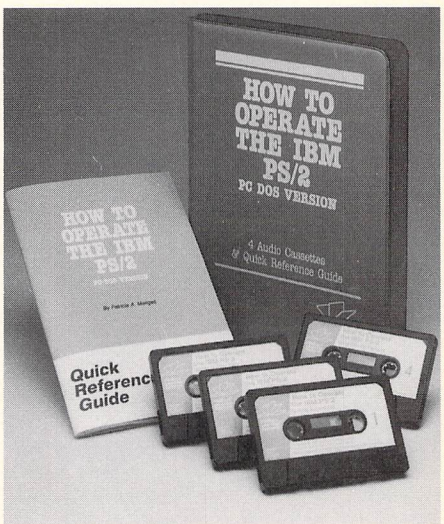
For information, contact US Robotics Inc., 8100 N. McCormick Blvd., Skokie, IL 60076; 312/982-5010.

Learn the PS/2

FlipTrack Learning Systems has introduced an audiocassette course for the IBM Personal System/2 computers.

Like a personal tutor on tape, *How to Operate the IBM PS/2* teaches the keyboard and PC-DOS operating system in a natural, step-by-step mode that eliminates the need for reading. The course is presented in four lessons of about two hours each. Topics include keyboard and hard-disk procedures, use of directory trees and paths, formatting and duplicating diskettes, file copying, renaming, deleting and more. Retail price is $99.

For information, contact FlipTrack Learning Systems, 999 Main, Suite 200, Glen Ellyn, IL 60137; 312/790-1117.



QNX Operating System

Quantum Software Systems Ltd. has introduced the QNX Operating System for the IBM PS/2 family of computers.

Features include multiuser, multitasking and integrated networking capabilities. In addition, QNX offers completely transparent downward compatibility with the IBM PC, PC-AT and compatibles.

For information, contact Quantum Software Systems Ltd., Kanata South Business Park, 175 Terrence Matthews Crescent, Kanata, Ontario, Canada K2M 1W8; 613/591-0931.

LANtastic Local Area Network

A local area network and LANmark software for the IBM PC and compatible computers has been introduced by Artisoft.

Called LANtastic, the network offers a unique combination of low-cost, high-speed, expandability and compatibility with other LANs, such as Novell, IBM and Tapestry. Retail price is $199.

For information, contact Artisoft Inc., 3550 N. First Ave., Suite 330, Tucson, AZ 85719; 602/293-6363.

Accelerator Cards

The 286 Express-12 and the 286 Express-16 from PC Technologies are half-slot accelerator cards. They feature 12 MHz- and 16 MHz-80286 microprocessors with 16K of cache memory to speed up 8088-based personal computers that operate at clock speeds of 4.77 MHz up to 8 MHz. The cards are designed to provide independence from the CPU clock frequency on the system motherboard. The 12 MHz version sells for $645, and the 16 MHz unit retails for $795.

For information, contact PC Technologies Inc., 704 Airport Blvd., Box 2090, Ann Arbor, MI 48106; 800/821-086 or 313/996-9690.

Go Online for More Product Announcements

The following new product announcements are available this month in *Online Today Daily Edition* by typing GO OLT-250 at any CompuServe Information Service prompt.

Quikey, *software that enhances the speed, convenience and control of the IBM PC and compatibles, Quincy Street Corp.*

How to Operate the IBM PS/2, *personal tutor on audio tape, FlipTrack Learning Systems.*

Media Master 5.0, *a disk-to-disk format conversion utility for the IBM PC and PS/2 computers, Intersecting Concepts.*

BROWSE, *software package for examining text files on EGA, VGA, CGA, MDA monitors and Hercules display controllers, Pico Publishing.*

The Big Munk, *double sided floppy disk drive for various laptop computers, Holmes Microsystems.*

ArcMarc, *standard file archiver for Apple Macintosh computers, dogStar Software.*

Arche Rival 386, *80386-based personal computer, Arche Technologies Inc.*

Model 2000 Battery Tester, *measures the percent of charge in a portable computer's battery, Vertox Co.*

Expert Key, *utility that adaptively learns words and phrases and later recognizes them after a few keystrokes, Newell Technologies Inc.*

The Brooklyn Bridge (Version 1.5), *enhanced version of a file transfer and file access utility, White Crane Systems.*

PC-File+

ButtonWare has introduced PC-File+ (version 2.0) with more than 30 new and enhanced features.

PC-File+ supports summary graphics with the ability to create horizontal and vertical bar charts as well as line, scatter and pie graphs. A calculator "hot key" has been added, so calculations may be performed at any time. Field data can be used in hot key calculations. In addition, the program now detects and uses an 8087 or 80287 floating point processor. Retail price is $69.95. Registered users of previous versions can upgrade for $30.

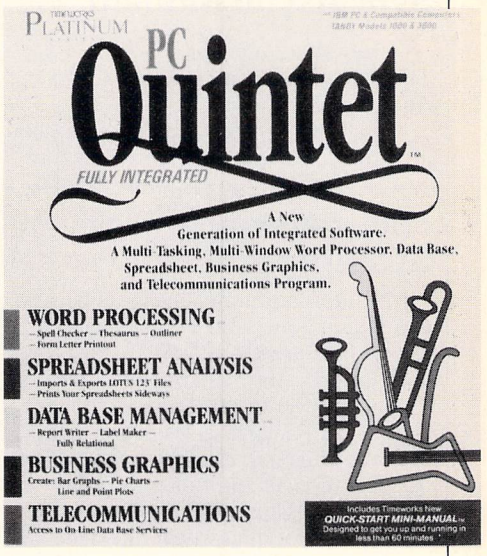
For information, contact ButtonWare, Box 5786, Bellevue, WA 98006; 206/454-0479. Information is also available by typing GO PCVEN on CompuServe.

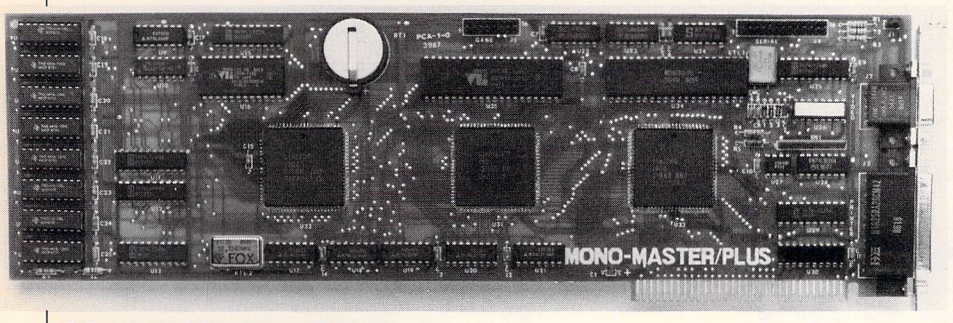
PC Quintet Graphics and Telecommunications

Timeworks has introduced PC Quintet, a multi-tasking, multi-window word processor, database, spreadsheet, business graphics and telecommunications program.

The fully integrated software is easy to use and includes a Quick-Start Mini-Manual designed to get the user up and running in less than 60 minutes. The software allows users to write a letter and perform mathematical calculations on the same screen. Designed for the IBM PC and compatibles and Tandy Model 1000 and 3000, PC Quintet sells for $99.95.

For information, contact Timeworks Inc., 444 Lake Cook Rd., Deerfield, IL 60015; 312/948-9200.





Mono-Master/Plus IBM Expansion

Boca Research has introduced Mono-Master/Plus, an IBM PC expansion product that features Hercules compatible monochrome graphics and I/O expansion capabilities.

Retailing for $199, the Mono-Master/Plus enables PC users to enhance their monochrome monitor's display and expand their PC system with a parallel and serial port. With the use of only one PC expansion slot, the unit combines the capabilities of three boards.

For information, contact Boca Research Inc., 6401 Congress Ave., Boca Raton, FL 33487; 305/997-6227.

Omnis Quartz Relational Database

Blyth Software has introduced Omnis Quartz, a Macintosh-like relational database for the IBM PC-AT.

Developed for the Microsoft Windows environment, Omnis Quartz takes full advantage of the Windows graphic interface, simplifies custom database design and significantly reduces development time. Sophisticated database applications, such as pop-up windows, pull-down menus and scrolling data fields, can easily be built in a fraction of the time required by traditional text-based databases. Bundled with Microsoft Windows, Omnis Quartz sells for $795.

For information, contact Blyth Software Inc., Corporate Offices, 1065 E. Hillsdale Blvd., Foster City, CA 94404; 415/571- 0222.

Amstrad Portable Micro

Amstrad has introduced the PPC 640 portable computer, complete with 2400-baud modem, for a retail price of $999 for a single disk drive and $1,099 for a dual drive.

Weighing only 11 3/4 pounds, the PPC 640 features an 8086 8 MHz, 16-bit processor, 80 by 25 row format, super-twist LCD display, single or dual 3.5-inch disk drives, 640K RAM memory, DOS 3.3 and 300/1200/2400 baud Hayes-compatible modem.

For information, contact Amstrad Inc., 1915 Westridge Dr., Irving, TX 75038; 214/518-0668.

Dr. Term Communications Program for Amiga

Progressive Peripherals and Software has introduced Dr. Term Professional, a powerful, flexible terminal communications program specifically designed for use with Amiga 500, 1000 and 2000 computers.

With its mouse-driven operation, Dr. Term Professional offers a wide choice of protocols, including answerback, XMODEM, YMODEM and WXMODEM. It also emulates VT100, VT52 and TTY terminals. Retail price is $99.95.

For information, contact Progressive Peripherals & Software, 464 Kalamath St., Denver, CO 80204; 303/825-4144.

SQZ! Plus Data Compressor

Symantec has introduced SQZ! Plus, an enhanced version of its SQZ! data compression program for spreadsheets.

As a multi-feature spreadsheet file utility program, SQZ! Plus for Lotus 1-2-3 and Symphony gives added protection to spreadsheet users and enhances the functionality of the program. It automatically and transparently compresses files up to 95 percent, allowing more efficient storage and faster file transmission. Retail price is $99.95.

For information, contact Symantec Corp., 10201 Torre Ave., Cupertino, CA 95014; 408/253-9600.

Sync/Async Modem

A new V.32 modem called the AJ 9631-DSA has been introduced by Anderson Jacobson.

This low cost, fully featured modem provides full-duplex, synchronous and asynchronous operation on dial-up lines or 2/4-wire leased lines. A choice of command sets for asynchronous auto-dialing is provided. For information, contact Anderson Jacobson, 521 Charcot Ave., San Jose, CA 95131; 408/435-8520.

Focus Management System for IBM PC

An information management system in a stand-alone IBM PC package for use with dBase III and III Plus has been introduced by Information Builders.

Called the Focus Report Writer for dBase, the package gives every dBase user the ability to quickly create ad-hoc queries, reports and full-color 3-D graphics without programming. It offers a completely menu-driven interface so even users with little knowledge of dBase or Focus can create reports and graphs quickly. Retail price is $349.

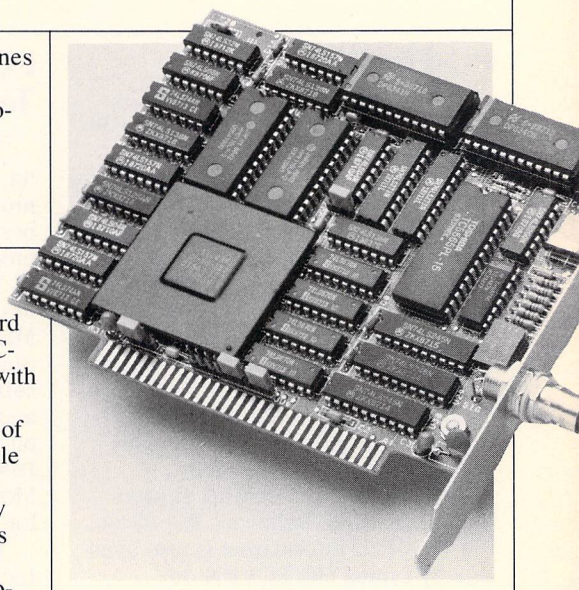
For information, contact Information Builders Inc., 1250 Broadway, New York, NY 10001; 212/736-4433.

Fax Modem Card

Ricoh introduces a fax modem card that enables the IBM PC, PC-AT, PC-XT and compatibles to communicate with Group 3 and Group 2 fax machines.

The Ricoh ImageCard allows use of the computer for other purposes while it is receiving or sending documents. Incoming messages are automatically saved to disk. The card also provides many of the capabilities of the latest stand-alone machines, including auto-dialing, automatic error-checking, and generation of a variety of useful reports for fax traffic control and equipment. The card and software sell for $1,175.

For information, contact Ricoh Corp., 5 Dedrick Pl., West Caldwell, NJ 07006; 201/882-2000.



Multi-Protocol Coax Board

A multi-protocol communications adapter board for the IBM PC, PC-XT, PC-AT and compatible computers attached via coaxial cable to an IBM 3274 or 3174 cluster controller has been introduced by Network Software Associates.

Called AdaptCoax, the board is the first on the market to support PC-to-host communications through a 3274/3174 using any one of the three IBM Systems Network Architecture protocols. The unit uses software-loaded communications emulation for the most flexibility. Retail price is $595. Associated software products are priced from $285 to $785.

For information, contact Network Software Associates Inc., 22982 Mill Creek, Laguna Hills, CA 92653; 714/768-4013.

Printer Interface

The Black Box PQ-Pro II Printer Interface card from Black Box is designed for the IBM Proprinter, Proprinter II or Proprinter X24.

The unit will produce low-cost near-letter-quality printouts and print documents identical to those produced on the more expensive IBM 4210 printer. Graphics printer functions can be downloaded with the PQ-Pro II, making it possible to support Advanced Printer Functions and Business Graphics Utility.

For information, contact Black Box Corp., P.O. Box 12800, Pittsburgh, PA 15241; 412/746-5530.

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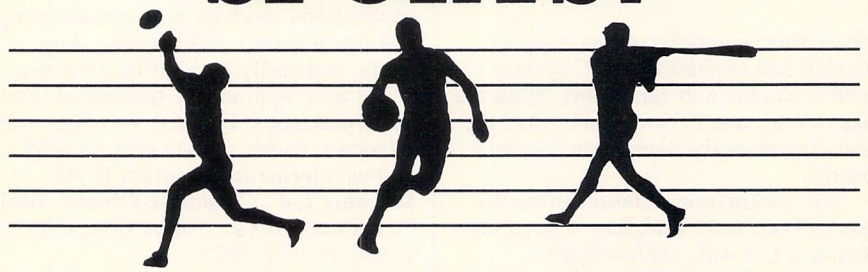

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Online Inquiry is *Online Today*'s electronic version of the traditional reader inquiry card. To request additional information about products or services described in *Online Today*, simply access CompuServe and type GO OLI at any prompt.

CompuServe Page OLI-1
ONLINE TODAY ADVERTISERS
ONLINE INQUIRY (OLI)

1. OLI Instructions
2. Online Today Display Ads
3. Print Edition Reviews
4. Shopper's Guide Mini-Ads

Display Ads

GO OLI-160. Inquiries to this section will be followed by a brief description of the *Online Today* ad. To request additional printed information, simply enter your name and address at the prompts. OLI will add your User ID number and electronically forward your request to the appropriate advertiser(s). The names, addresses and User ID numbers will also be forwarded via US Mail at the end of each month.

CompuServe Page OLI-160
ONLINE TODAY ADVERTISERS/OLI

1. May 1988 Advertisers
2. April 1988 Advertisers
3. Mar. 1988 Advertisers

Editorial Articles/Reviews

At the end of each electronic version product review, you'll be asked if you wish to request further information through the Online Inquiry system. A "yes" response will let the system prompt you for your name, address and other information so that your request can be forwarded to the appropriate company. If you respond "no," the system will return you to the previous menu.

To request information about products reviewed in the print edition, go to page OLI-280 and select the appropriate listing, such as May Hardware Reviews. At the next menu, select the product you're interested in. If you answer "yes" at the question prompt, the OLI system will prompt you for the necessary information.

Requests to these sections will be stored and forwarded by traditional mail once each month.

CompuServe Page OLI-280
REVIEW LISTINGS/PRINT EDITION

1. May Hardware Listings
2. May Software Listings
3. May New Product Listings

Shopper's Guide

GO OLI-70 to get information about *Online Today*'s mini-ad program.

To request information from Shopper's Guide advertisers, follow the instructions outlined in each ad.

CompuServe Page OLI-70
SHOPPER'S GUIDE

1. About Shopper's Guide
2. Rates and Information

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Merrill Lynch	86	193	357
E.F. Hutton	84	180	399
Dean Witter Reynolds	72	180	360

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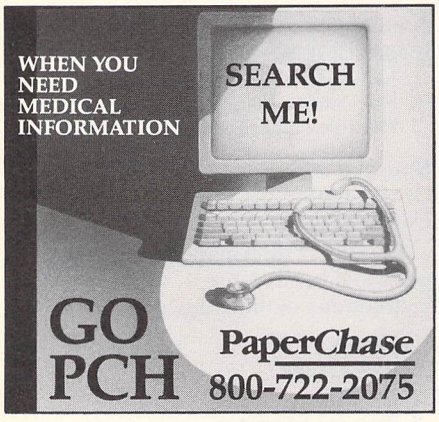

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For free information on products or services in this issue of *Online Today*, fill in your name, address, ZIP code and phone number. Then circle the number that corresponds to the number of the advertisement or article in which you are interested.

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UPDATE

OAG Offers New Feature

The Official Airline Guide Electronic Edition has added Availability, a feature that enables users to access live seat and fare availability information before entering the booking system. GO OAG

Board of Regents Exams Online

The Multiple Choice offers the Board of Regents online exams that measure competency and provide in-depth preparation for other tests including the Scholastic Aptitude Test.

Test topics include mathematics, social studies, biology, chemistry and physics. Questions are taken from actual Board of Regents exams. GO TMC

New Merchants in The Electronic Mall

The Electronic Mall® has several new stores. Crabtree & Evelyn (GO CR) offers a collection of toiletries and gift packs online. Harris' Scent-Sations (GO HR) is online from the California-based Harris department store. Elite Eyewear (GO EE) offers prescription eyewear. And Some Things Special (GO SP) features computing videos, T-shirts and other unique items. GO MALL

Weekly *SeaWAR* Conferences in Multi-Player Games Forum

Weekly *SeaWAR* (GO SEAWAR) conferences have begun in the Multi-Player Games Forum in Room 5 of the conference area each Wednesday at 10 p.m. EDT.

The conferences, hosted by *SeaWAR* Game Operator Chris Daldegan, cover game strategies and suggestions for game changes. The first conference of each month is set aside for *SeaWAR* beginners' classes hosted by Daldegan and experienced *SeaWAR* players. GO MPGAMES

CD-ROM Forum Now Available

The CD-ROM Forum provides a meeting place for subscribers with business and personal interests in CD-ROM. It offers technical support, including information about adding a CD-ROM drive to a computer system and tips on data preparation.

Discovery Systems is sponsoring the forum. Battelle subsidiary Information Dimensions, TMS and Video Laser Systems are also participating. GO CDROM

Health Forum Reorganized

The Consumer Health Forum has added a new subtopic, Health Legal Issues, and the data libraries have been reorganized to make finding information on health-related topics easier.

The Health Legal Issues section addresses euthanasia, smoking in airplanes and abortions. The reorganized data libraries cover nutrition, Alcoholics Anonymous, AIDS, family life, senior citizens, sexuality, emotional health and women's health. GO GOODHEALTH

Borland Offers Feedback System

The Borland Customer Service Feedback System, available through the Borland company information area, enables subscribers to obtain information about individual business matters, status of updates, upgrades and pre-sales product information from Borland's Customer Service.

To help Borland answer questions efficiently, subscribers can leave a detailed question in the product area and the system will prompt for other items such as the version number. Borland will respond via EasyPlex. GO BORCS

Atari Vendors' Forum Available

The Atari Vendors' Forum provides support and information for Atari-related products. Participating vendors include *Atari Explorer Magazine,* Avant Guarde Systems, Foresight Resources, ICD, Intersect, Michtron, Quantum Microsystems and Regent. More vendors will be added. GO ATARIVEN

Bowen and Peyton Join *Online Today* Readers' Forum

Charles Bowen and David Peyton, co-authors of *How to Get The Most Out of CompuServe* and *Advanced CompuServe for IBM PC Power Users* (Bantam Books), maintain a discussion on the *Online Today* Readers' Forum message board. The new section, HTGTMOOC (How to Get the Most Out of CompuServe), resides in the forum's Subtopic 7. Bowen and Peyton answer questions, address comments and suggestions, and offer advice about using CompuServe more efficiently. GO OLTFORUM

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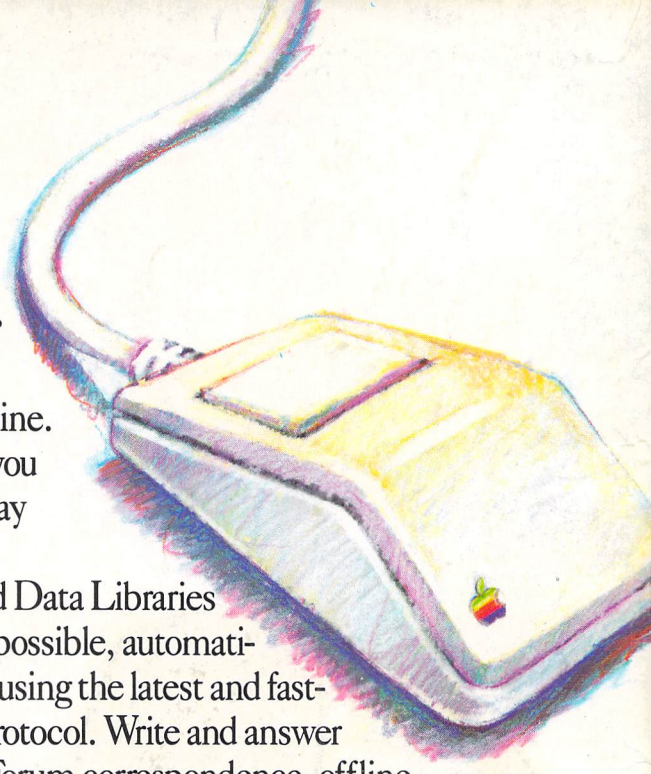

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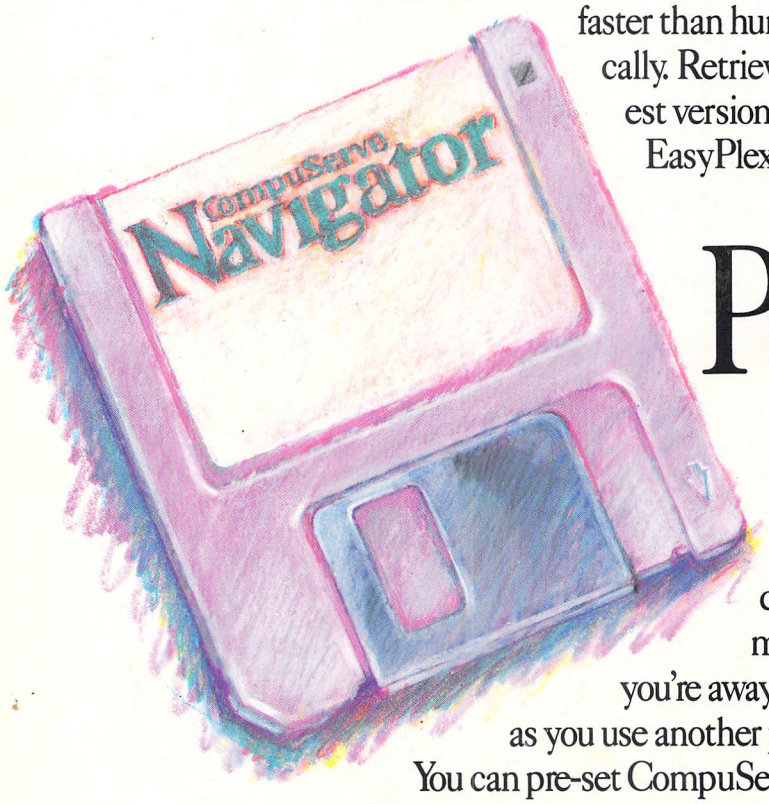

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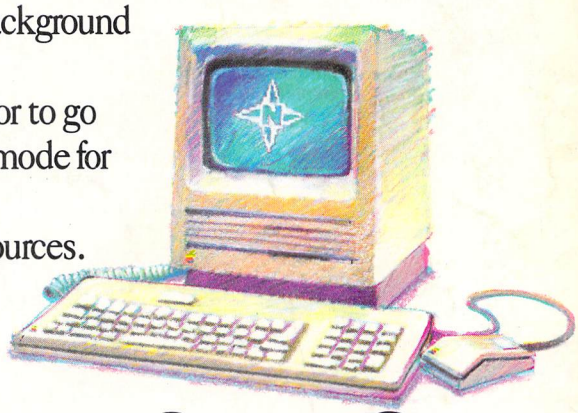

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